A psychometric evaluation of the *ASSIST* in Pitjantjatjara

the journey so far ...

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We acknowledge and pay our respects to the Kaurna people,
the traditional custodians whose ancestral lands we gather on.

We acknowledge the deep feelings of attachment and relationship of the Kaurna people to country and we respect and value their past, present and ongoing connection to the land and cultural beliefs.

Key collaborators

A/Prof Robert Ali, AO

Mark Thompson

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Prof. Kylie Lee

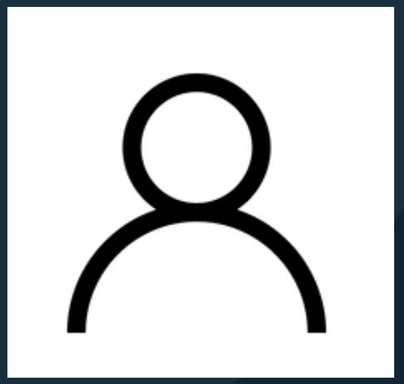
Dr. Sue Bertossa

Prof. John Marsden

Dr. Chris Holmwood

Dom Barry

Craig Hendry



Matthew Pedler

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Thank you also to

Cultural advisors

Translators & Interpreters

Research Staff – at DASSA, Flinders Wellbeing Centre, ADAC

And of course, the participants and their families who kindly gave up their time to be involved.

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In medias res

‘In the middle of things’

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A brief synopsis …

What's the main idea?

Validating a new, digital screening tool for use in Aboriginal Australian communities

What are the main measure(s)?

The Pitjantjatjara ASSIST (Based on ASSIST screening tool)

Diagnostic interview

Why is it important?

Several tools available but have limitations

(e.g., not available in language; may lack cultural appropriateness; lack co-design with community; only assess a single substance or narrow subset of problems (i.e., dependence)

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What is ASSIST? WHO ASSIST Working Group, 2002

‘Alcohol, Smoking & Substance Involvement Screening Test’

8-item questionnaire

Screens for all drugs (including misuse of prescription medication)

Provides risk assessment connected to a brief intervention

Screening component takes around 5-minutes

Developed primarily for health care workers in primary care and welfare settings

Cross-culturally neutral (vs. western cultures)

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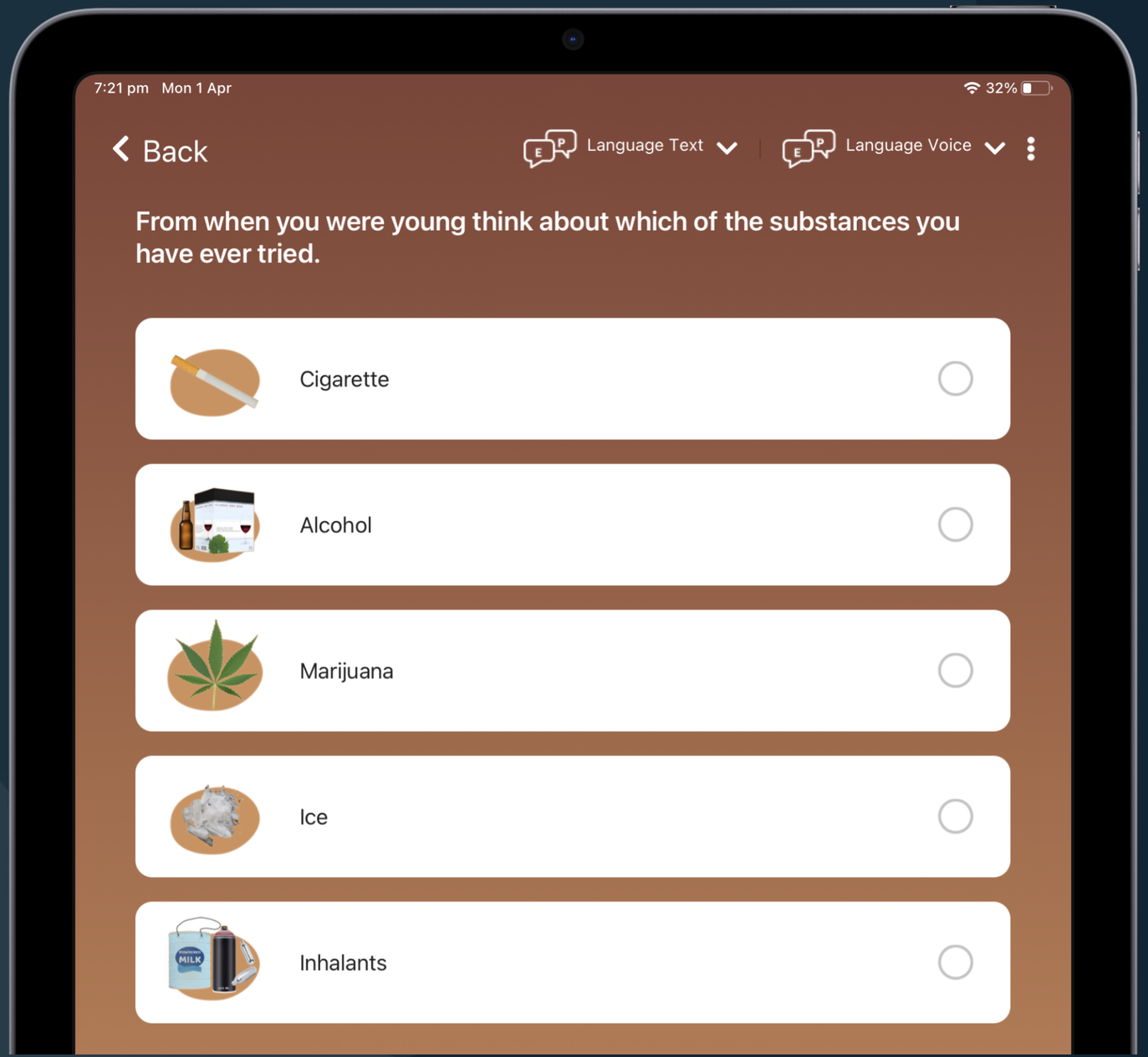
The Pitjantjatjara ASSIST

- **Based on ASSIST (WHO, 2002)**
  - Improvements for interpretability
- **Identifies risky use**
- **Provides:**
  - Risks associated with current use
  - Feedback/advice on cutting down
  - Opportunity for a brief yarn



How is Pitjantjatjara ASSIST different?

Only covers five key drugs of concern:

- Alcohol
- Tobacco
- Cannabis
- *Ice*
- Inhalants

Some questions split into components (i.e., harm questions)

Steps through each drug sequentially

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First-Stage Development of the Pitjantjatjara Translation of the World Health Organization's Alcohol, Smoking and Substance Involvement Screening Test (ASSIST)

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Authors

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This study aims to:

Confirm validity of Pitjantjatjara ASSIST against ICD-11 and DSM-5-TR classifications

Confirm reliability of Pitjantjatjara ASSIST for internal consistency and repeated measures

Establish diagnostic thresholds for low, moderate and high-risk use

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Key methodology

Design:

- Randomized Crossover Clinical Trail (with repeated ASSIST within 28 days)

Participants:

- Anangu men and woman
- 18-65 years
- Fluent in Pitjantjatjara (spoken or written)

Measures:

- Pitjantjatjara ASSIST – self-complete
- Diagnostic Interview (using DIS-SAM) – with trained interviewer and translator

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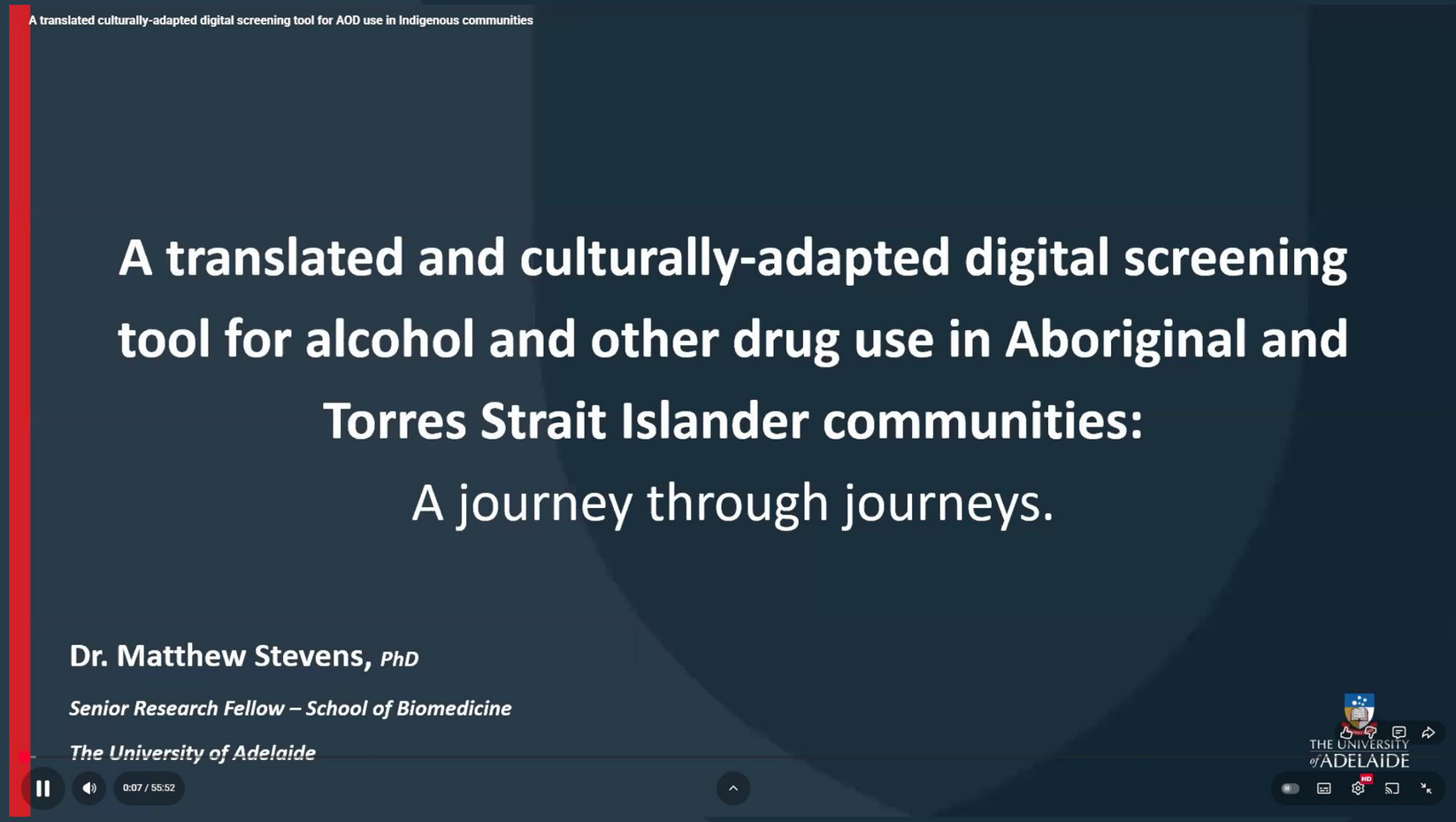

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Study Protocol & SAP

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ASSIST in Pitjantjatjara: Protocol for a randomised crossover validation study among Aboriginal and Torres Strait Islander Australians

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Validation of the Pitjantjatjara ASSIST in a Randomized Crossover Clinical Trial: Statistical Analysis Plan

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July 14, 2025

Contents

What are we investigating?

ASSIST screening

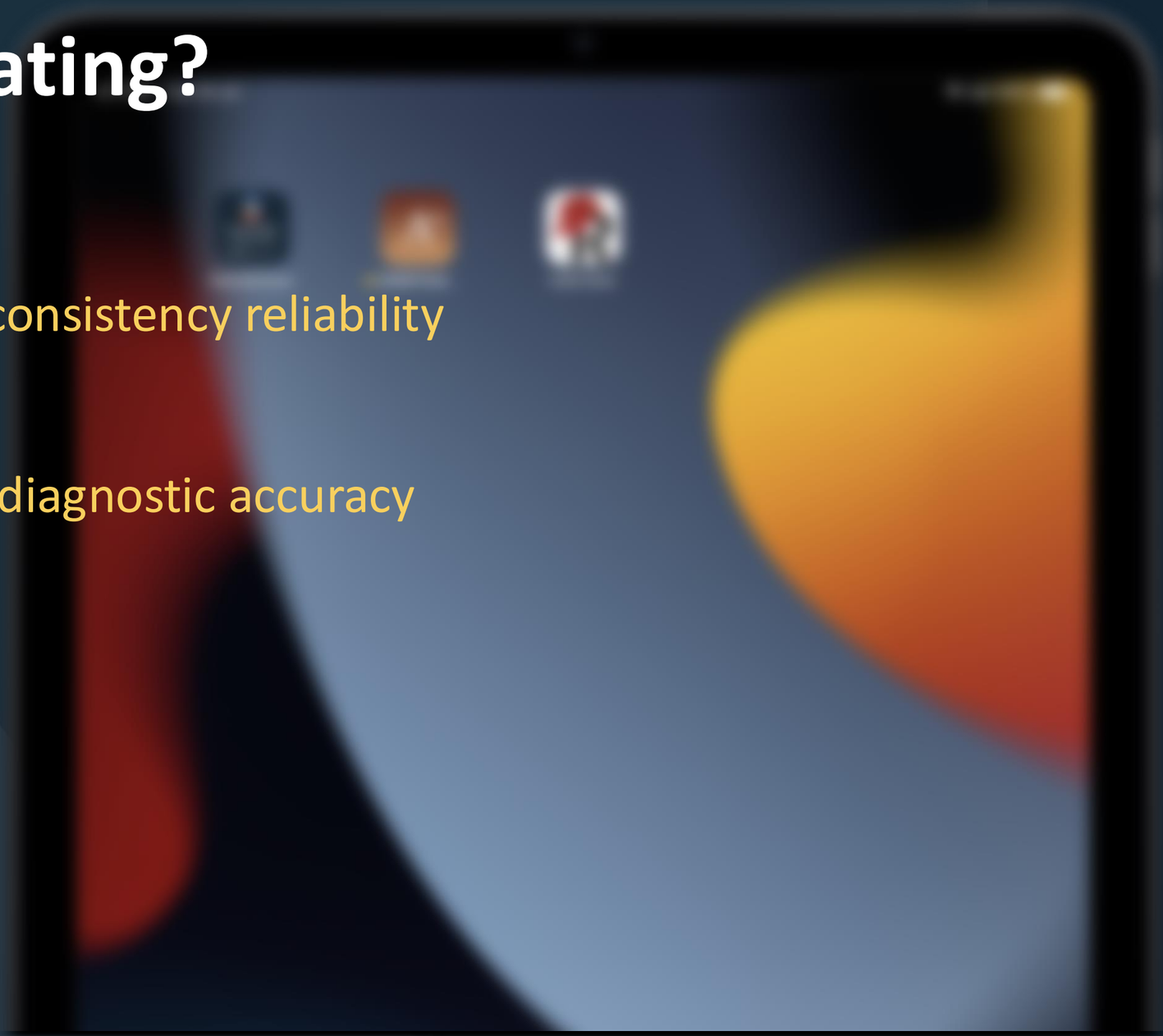
- Feasibility, acceptability, internal consistency reliability

Diagnostic Interview

- Concurrent, discriminant validity, diagnostic accuracy

ASSIST re-screening (7-28-days)

- Test-retest reliability



Preliminary Results

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a gentle request …

This study is ongoing and the data has not yet been published – so please kindly refrain from taking any photos or posting anything online ☺

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Participants

	Completed interview (N=127)	Completed Follow-up (N=65)
Female	71 (60.6%)	39 (60.0%)
Age (M, SD)	37.6 ± 9.4	37.6 ± 9.6
Recruited from:		
Metro (i.e., Adelaide)	104 (81.9%)	52 (80.0%)
Regional (e.g., Ceduna)	17 (13.4%)	8 (12.3%)
Remote (i.e., APY lands)	6 (4.7%)	5 (7.7%)
Substance use past 3m		
Tobacco	96 (75.6%)	46 (70.8%)
Alcohol	63 (49.6%)	28 (43.1%)
Cannabis	46 (36.2%)	25 (38.5%)
Methamphetamine	7 (5.5%)	3 (4.6%)
Inhalants	1 (0.8%)	1 (1.5%)

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Clinical characteristics

	ICD-11 Dependence	DSM-5 Severe SUD	Any ICD-11	Any DSM-5
Tobacco/Nicotine	46 (35.9%)	20 (15.6%)	54 (42.2%)	85 (66.4%)
Alcohol	61 (47.7%)	47 (36.7%)	75 (58.6%)	87 (68.0%)
Cannabis	27 (21.1%)	11 (8.6%)	31 (24.2%)	49 (38.3%)
Methamphetamine	5 (3.9%)	2 (1.6%)	7 (5.5%)	9 (7.0%)
Inhalants	0 (0%)	0 (0%)	1 (0.8%)	2 (1.6%)

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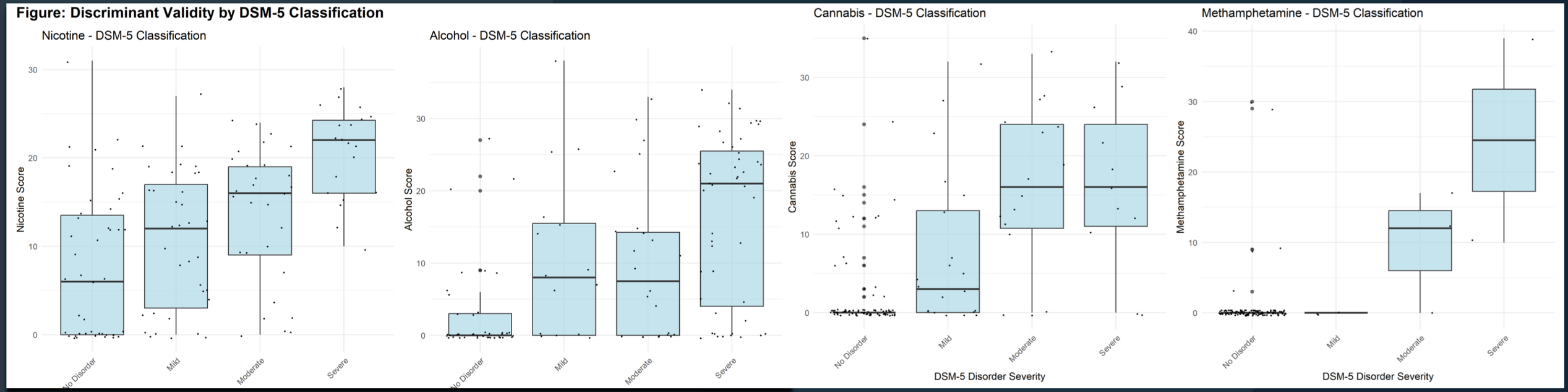
Discriminant validity — DSM-5

Groups indicated by DSM-5 diagnosis



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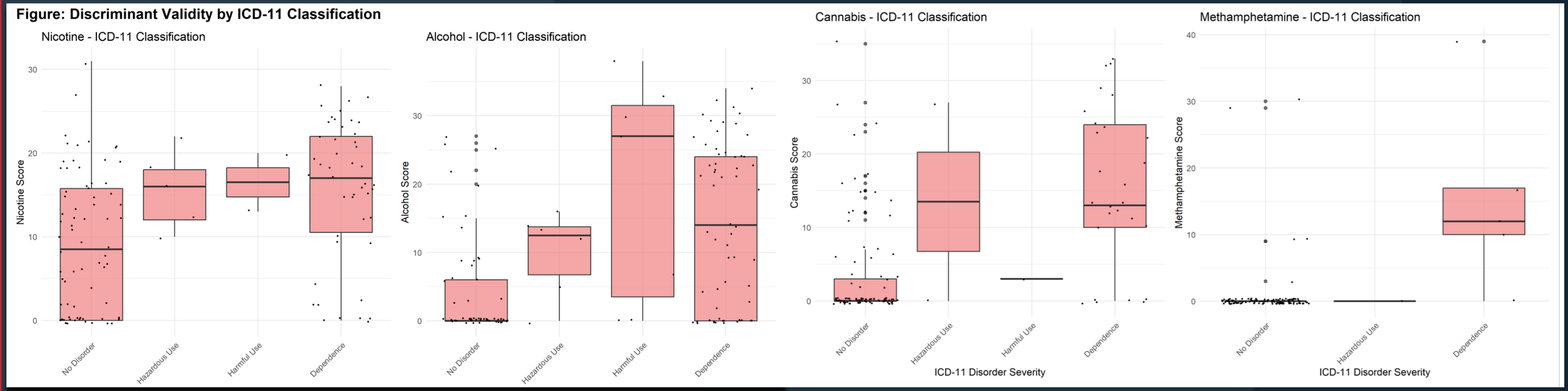
Discriminant validity — ICD-11

Groups indicated by ICD-11 diagnosis



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Concurrent validity

Partial Correlations (controlling for demographics (i.e., age, gender, employment status, primary language used at home) and interview outcomes for other substances

	ICD-11 symptom clusters	DSM-5 symptoms
Tobacco	.51	.51
Alcohol	.48	.49
Cannabis	.53	.56
Methamphetamine	.45	.45

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Internal Consistency Reliability

McDonald's Hierarchical Omega Coefficient.

NB: Also reporting Total Omega and Cronbach's Alpha for transparency.

Substances with fewer than 40 cases not reported.

	Omega Hierarchical	Omega Total	Cronbach's Alpha
Tobacco	.65	.75	.69
Alcohol	.86	.87	.81
Cannabis	.76	.76	.73

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Test-Retest Reliability

Intraclass Correlation Coefficients – two-way, mixed effects

NB: only substances with >20 participants included for demonstration.

	ICC
Tobacco	.620
Alcohol	.603

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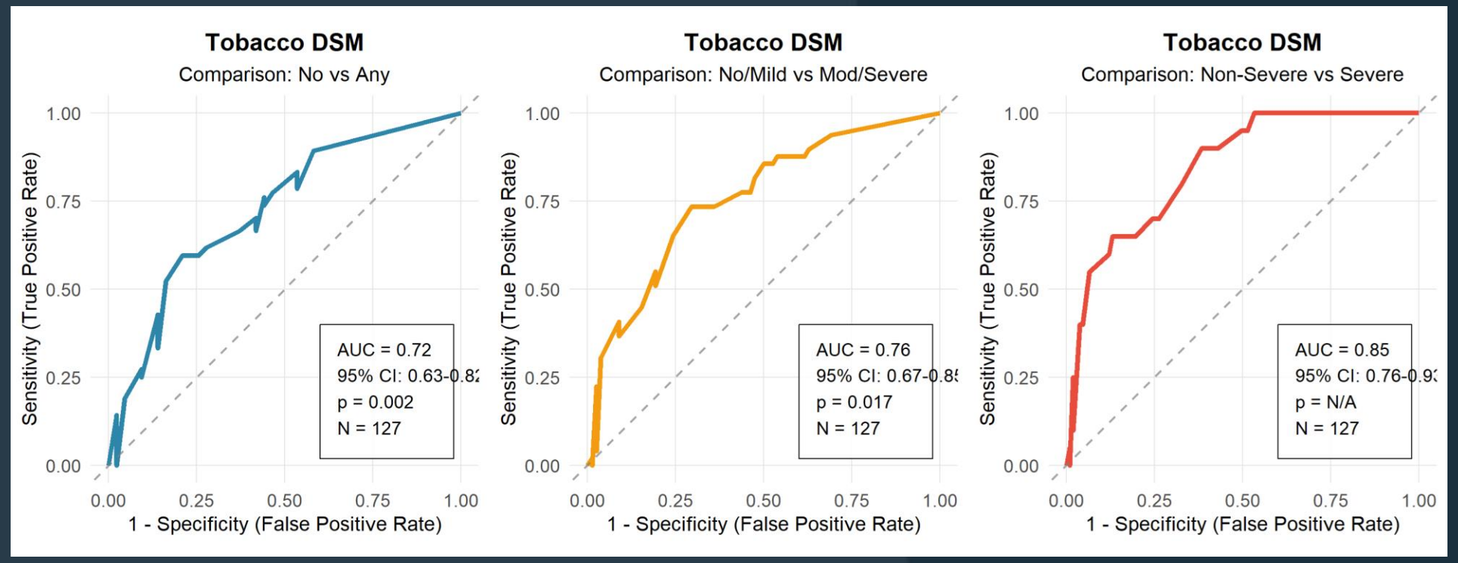
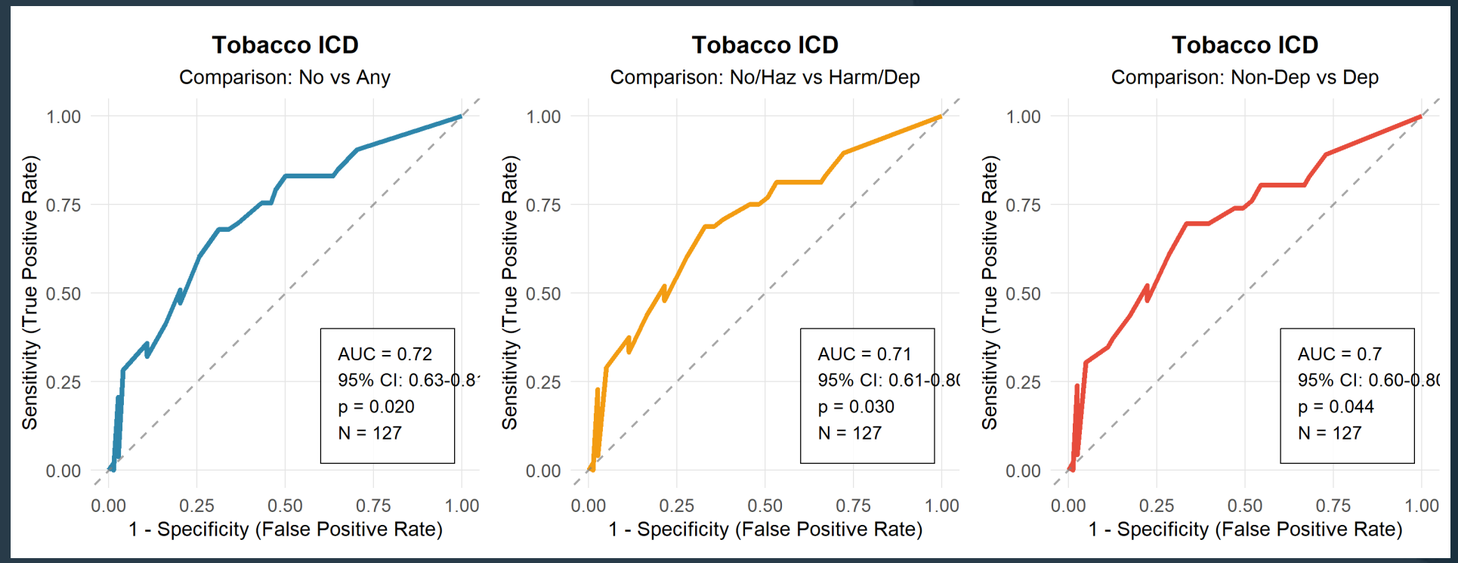
Diagnostic accuracy





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For now

- **Alcohol, nicotine/tobacco and cannabis:**
  - preliminary signs of validity, reliability and diagnostic performance
- **Other substances:**
  - too early to tell

Next steps:

- **Recruitment to continue until we reach our recruitment objectives**
  - ~41 low, moderate and high risk users each for each substance
- **Exploring different strategies for recruitment of other substances,**
  - greater representation in regional/remote locations

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make history.

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