Development and validation of a DSM-5 version of the NODS

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Purpose

- The National Opinion Research Center Diagnostic Screen for Gambling Problems (NODS) is one of the most used outcome measures in gambling intervention trials.
- The NODS is the only measure of problematic gambling behaviour that comprehensively covers the DSM criteria and yields a gambling disorder diagnosis.
- However, a screen based on DSM-5 gambling disorder criteria has yet to be developed or validated since the DSM-5 release in 2013.

Background

South Oaks Gambling Screen (SOGS)
- Based on the DSM-III criteria for pathological gambling.
- Adequate internal consistency for community **(α = .69)** and good internal consistency for clinical samples **(α = .86)**.
- Administered as a self-report questionnaire or interview.
- Largely surpassed by the PGSI (Ferris & Wynne, 2001).

Problem Gambling Severity Index (PGSI)
- High correlations with other measures of problem gambling severity **(r = .83)**, as well as good internal consistency **(α = .84),** excellent specificity **(1.0),** and adequate sensitivity (**.83**) (Ferris & Wynne, 2001).
- Administered as a self-report questionnaire.

National Opinion Research Center Diagnostic Screen for Gambling Problems (NODS)
- Diagnostic tool based on DSM-IV criteria for pathological gambling.
- High correlations with other measures of problem gambling severity (**r = .86**) and moderate correlations with gambling expenditures and number of days gambled (***r* = 0.50**), as well as fair internal consistency (**α = .78**) (Hodgins, 2004).
- Administered as an interview.

Changes in diagnostic criteria from DSM-IV to DSM-5
- Omission of the criterion pertaining to illegal acts committed to fund gambling.
- Reduction of diagnostic threshold from 5 to 4 criteria.

Methods

Participants
- 323 participants (48% female, mean age = 40.19).
- Participants compensated roughly 10 cents per minute (average response time = 10 minutes)

Procedure
- Online survey via Amazon's TurkPrime (Litman et al., 2017)

Questionnaires:
Demographics
Gambling behaviour questions
CIDI gambling module
NODS
NODS-5
PGSI
PHQ
SSBA

Amazon's TurkPrime

Is TurkPrime a reliable recruitment tool for this population?
- TurkPrime has become a popular recruitment tool for psychologists, including those studying addictions.
- Slightly higher rates of pathological gambling behaviours have been found among TurkPrime samples (Kim & Hodgins, 2016).
- Studies examining the quality of TurkPrime data show good reliability and validity, and provide recommendations for obtaining quality data (Kim & Hodgins, 2017).

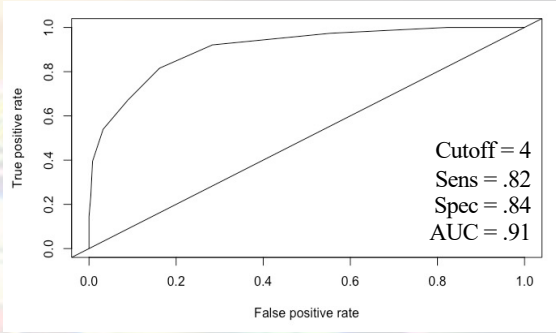
Results

Psychometric Properties of the NODS-5

	NODS-5
Internal Consistency	.87
Test-Retest Reliability	.70
Correlations	
NODS	.99
PGSI	.63
SSBA gambling scale	.50
Expenditures per month	.32
Expenditures per session	.26
Hours per month	.27
Hours per session	.25
PHQ	.22

Notes. n = 323. All correlations are significant with a p-value < .001. Shapiro-Wilks tests showed that the data are non-normally distributed. Thus, Kendall's tau was used for the correlations.

Results



Discussion

- Despite minor changes to DSM criteria, it is crucial that the most clinically relevant gambling measure in the NODS be updated so that it accurately captures the DSM-5 criteria for gambling disorder.
- The **NODS-5** demonstrated good internal consistency, fair test-retest reliability, and appropriate correlations with other measures of gambling behaviours.
- Relative to the original NODS, the **NODS-5** demonstrated improved internal consistency and comparable correlations with other measures.
- Future research should compare **NODS-5** to a structured interview.

References

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