

# Identifying probationers with mental disorder: Validating a mental health screening questionnaire

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# How can agencies identify probationers with mental disorder (PMDs)?

- Agencies need an efficient, accurate screening tool to identify PMDs
- Qualities of an ideal screening tool:
  - Self report
  - Brief
  - Captures range of symptoms that probationers have
- Current screening tools:
  - May require interview
  - May not capture full range of symptoms
  - Not validated for probationers

# Most promising existing tools

- K-6 (Kessler et al., 2003)
  - 6 items, self-report
  - Validated on general population
  - Designed to measure “non-specific distress,” but accurately identifies persons with any Axis I disorder (non-substance)
- Example item:
  - During the past 30 days, how often did you feel restless and fidgety?

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1	2	3	4	5
None of the time	A little of the time	Some of the time	Most of the time	All of the time

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# Most promising existing tools

- Brief Jail Mental Health Screen (BJMHS; Steadman et al., 2005)
  - 8 items, administered via interview
  - Validated on jail populations
  - Designed to assess for major mental illness, need for treatment
- Example item:
  - Do you *currently* believe that someone can control your mind by putting thoughts into your head or taking thoughts out of your head?  
YES                      NO

# Aims of current study

1. To determine the convergence between screens developed for the general population and jail population in identifying mental disorder in a sample of probationers.
2. To determine which of these screens performs best in predicting SCID-diagnoses of a major mental disorder.

# Phase 1: Screening



- All new adult probationers ( $N= 4,675$ ) in a large probation agency completed a conjoint screening tool
  - Probationers were alerted to the possibility of participating in the interview portion of the study, those who were interested provided the study team with contact information
- Measure: conjoint screening tool comprised of:
  - K-6 (Kessler et al., 2002)
  - Brief Jail Mental Health Screen (BJMHS; Steadman et al., 2005)
  - PTSD items from the MINI Screen (Sheehan et al., 1998)

## Phase 2: Interviews



- 150 probationers were interviewed
  - 75 screened in, 75 screened out according to the K6
- Measure: Structured Clinical Interview for DSM Disorders (SCID-IV)
  - Modules: Mood, Psychotic, Anxiety and Substance Disorders

# Sample

4,675 Screened

1,686 (36%)  
eligible

2,989 (64%) refused  
to be contacted

181 (10.7%)  
screened in

1,505 (89.3%)  
screened out

119 recruited

127 recruited

75 interviewed

44 (37%)  
refused

75 interviewed

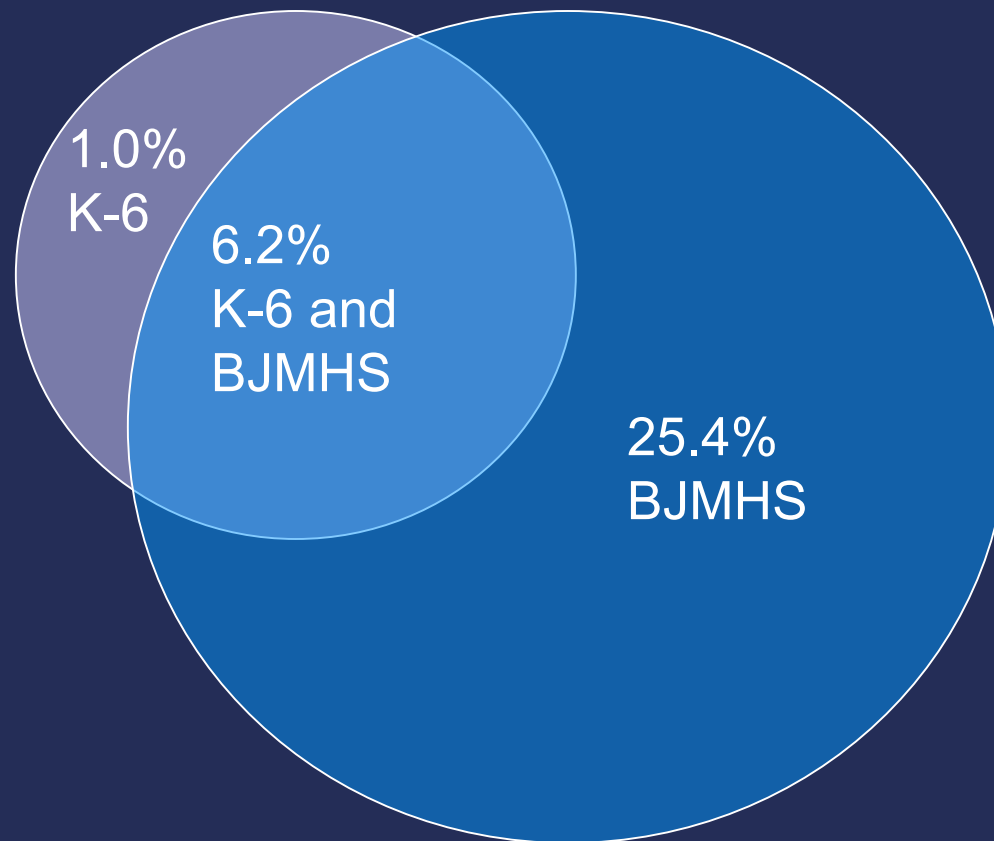
52 (41%)  
refused

# Participants



- Of the 150 probationers interviewed:
  - 101 (67.3%) were male
  - Mean age was 33.9 ( $SD = 11.1$ , range = 18 to 61)
  - Ethnicity:
    - 38.7% Caucasian
    - 28.7% Latino(a)
    - 27.3% African American
    - 2.7% Native American/Alaska Native
    - 2.0% Asian/Pacific Islander

# Aim 1: How much agreement is there between the screens?

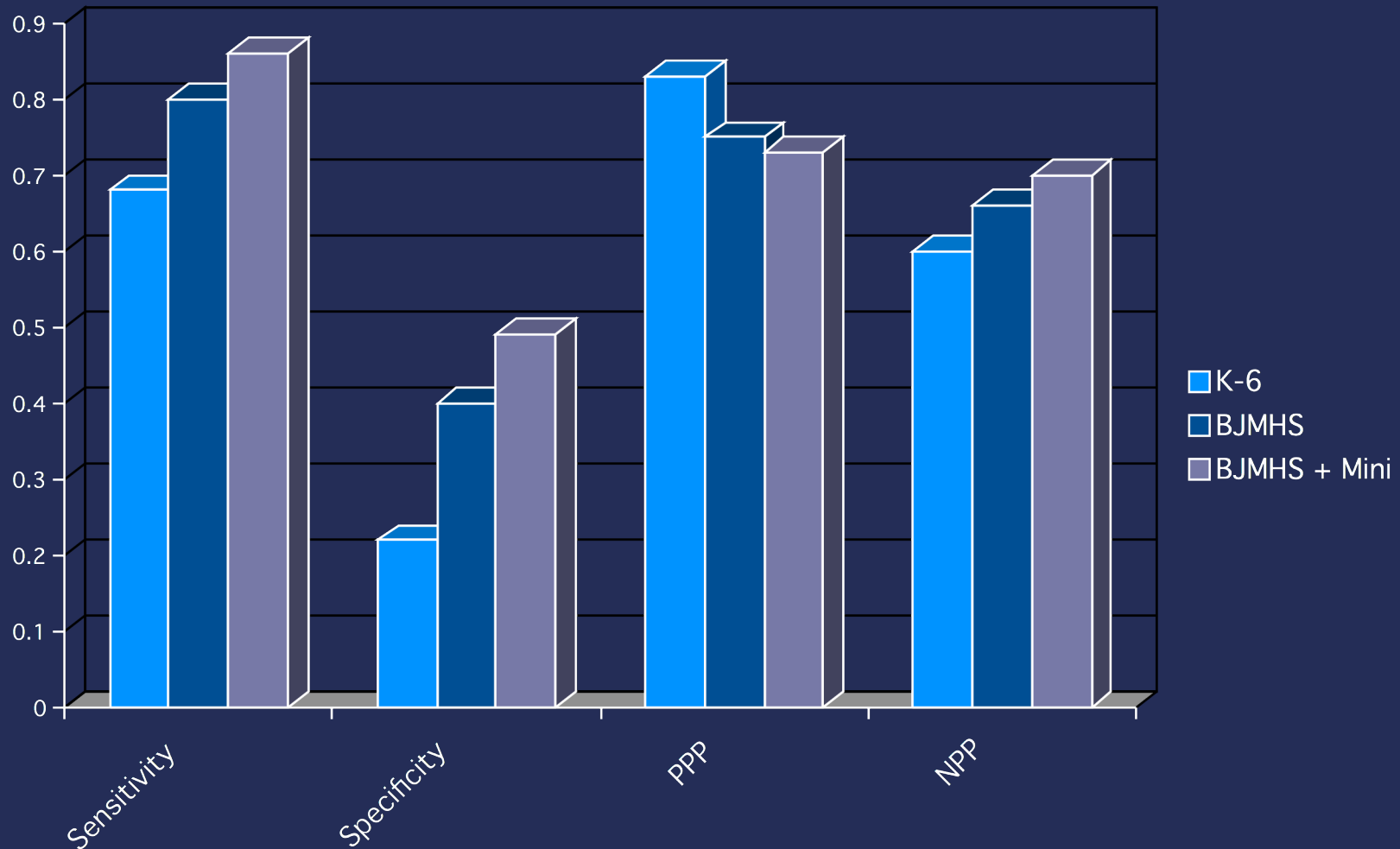


*kappa* = .35

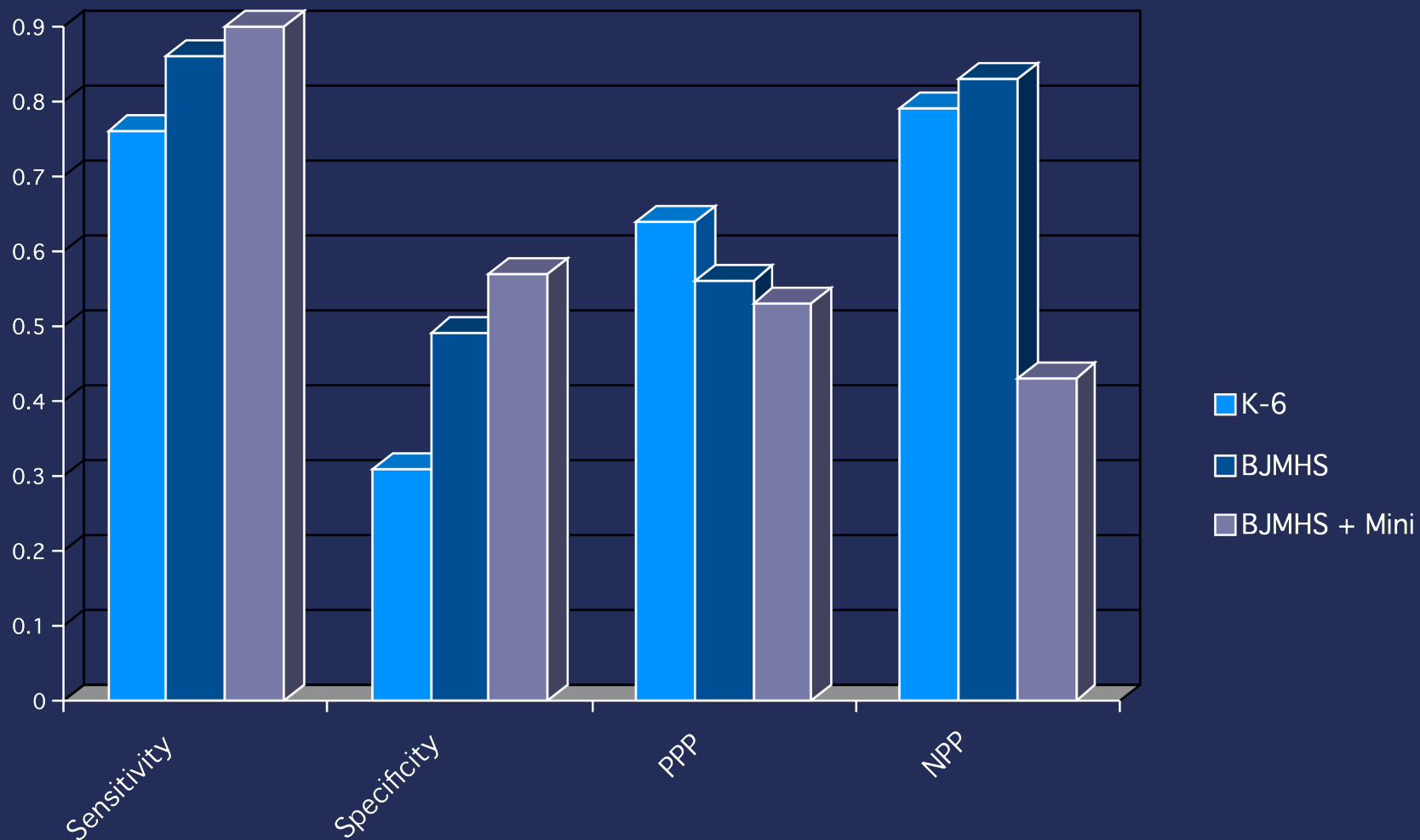
# Aim 2: How well do the screens perform?

- To assess the relative performance of the screens, we computed:
  - Sensitivity: probability of producing a true positive
    - Person has a mental disorder--what is the chance that they will score above the cutoff?
  - Specificity: probability of producing a true negative
    - Person does not have a mental disorder--what is the chance they will score below the cutoff?
  - Positive Predictive Power: chances a person with a score above the cutoff has a mental disorder
  - Negative Predictive Power: chances a person with a score below the cutoff does not have a mental disorder

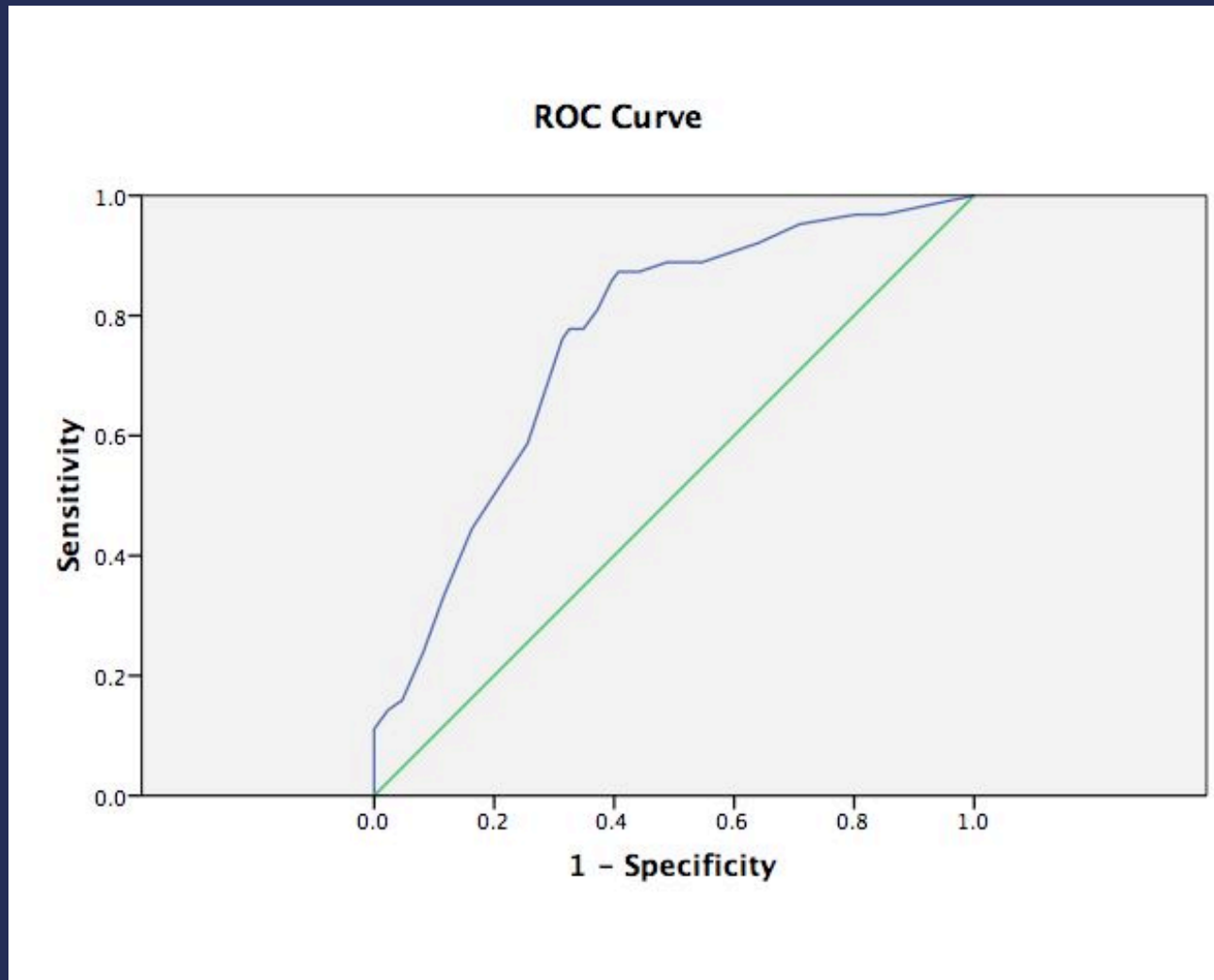
# Comparison of screens for predicting *any* Axis I disorder



# Comparison of screens for predicting major mental disorder



# Receiver-Operating Characteristic (ROC) analysis of K-6



$AUC = .76$

# Conclusions



- Screening tools developed for other populations did an acceptable job at identifying probationers with mental disorders
  - K-6 may miss people who have a mental disorder, but does a good job with both genders
  - BJMHS is less likely to miss PMDs, but does not perform as well with women
- Accuracy of K-6 in this probation sample is similar to accuracy of several screens tested in prison samples (see Sacks et al., 2007)
- Sample is potential limitation