

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

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This research was supported by Grants-in-Aid from the American Psychology-Law Society (AP-LS) and the Society for the Psychological Study of Social Issues (SPSSI), as well as a grant from the Department of Psychology & Social Behavior at the University of California, Irvine.

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?

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

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

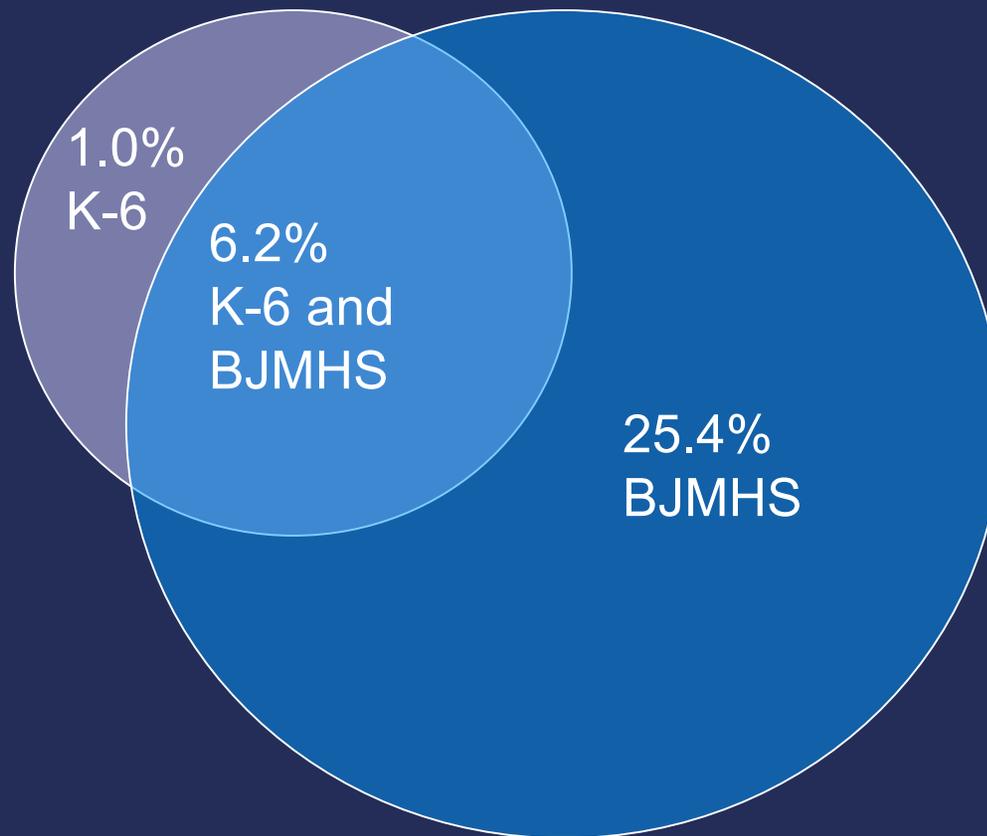
52 (41%)
refused

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?

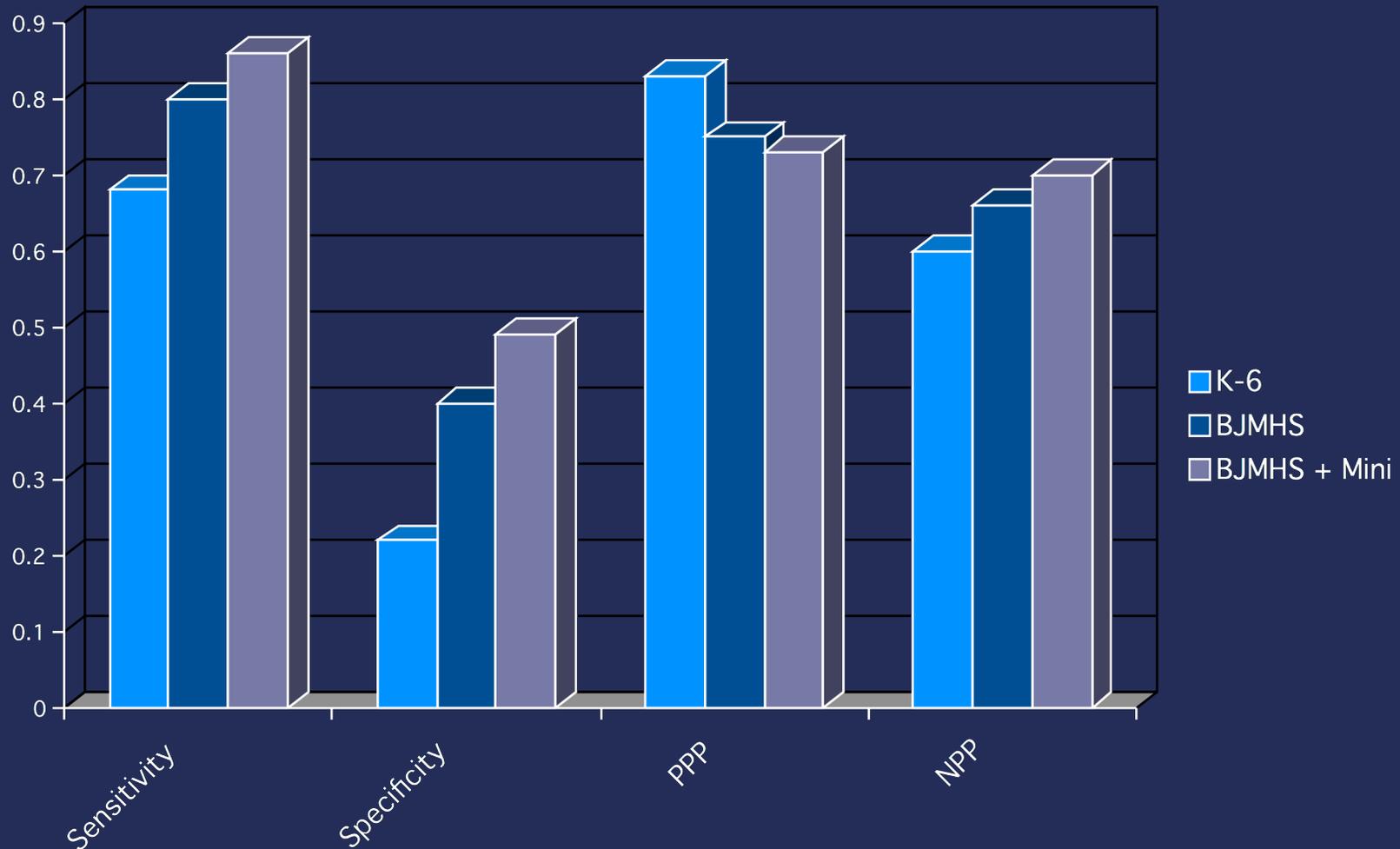


kappa = .35

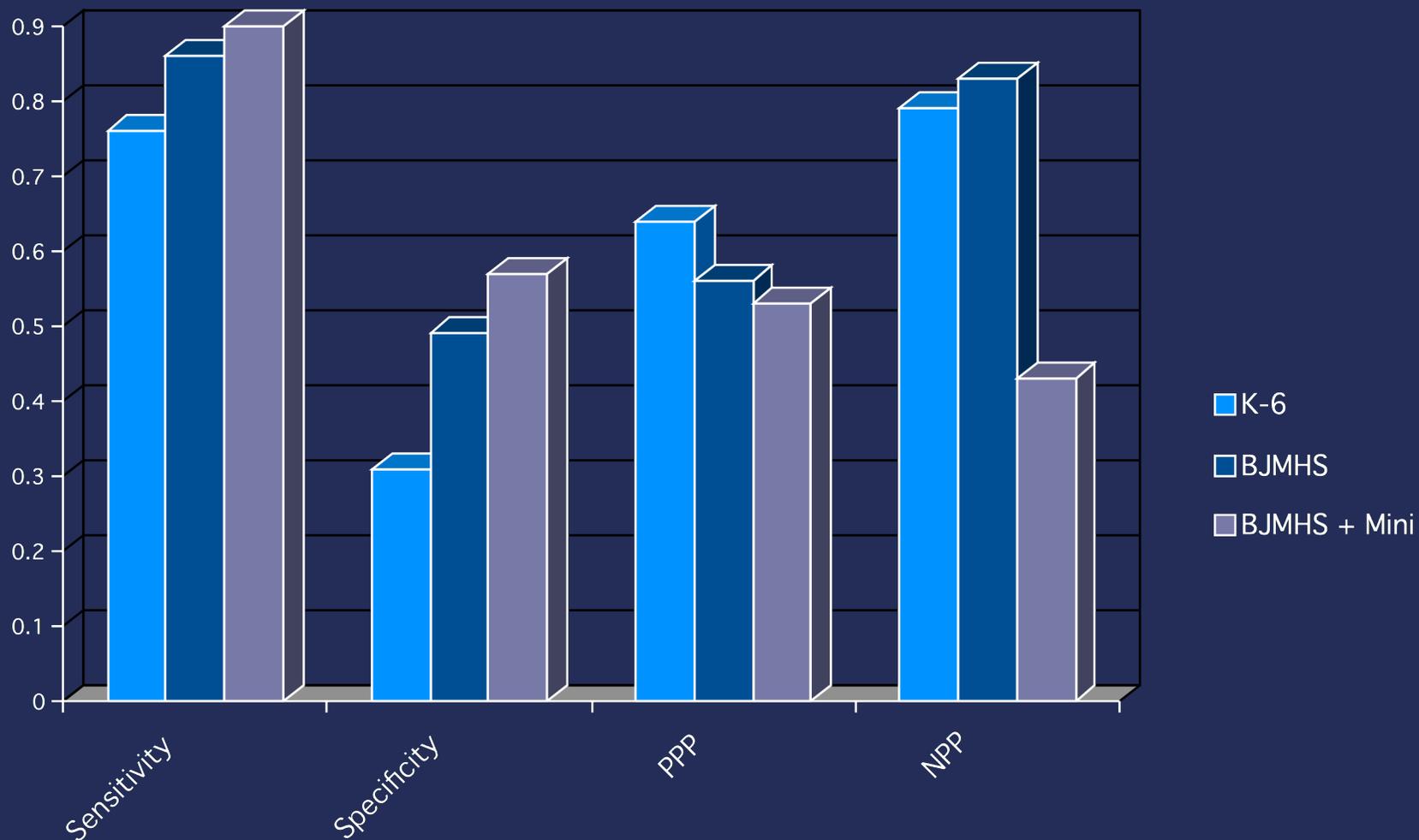
Aim 2: How well do the screens perform?

- 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

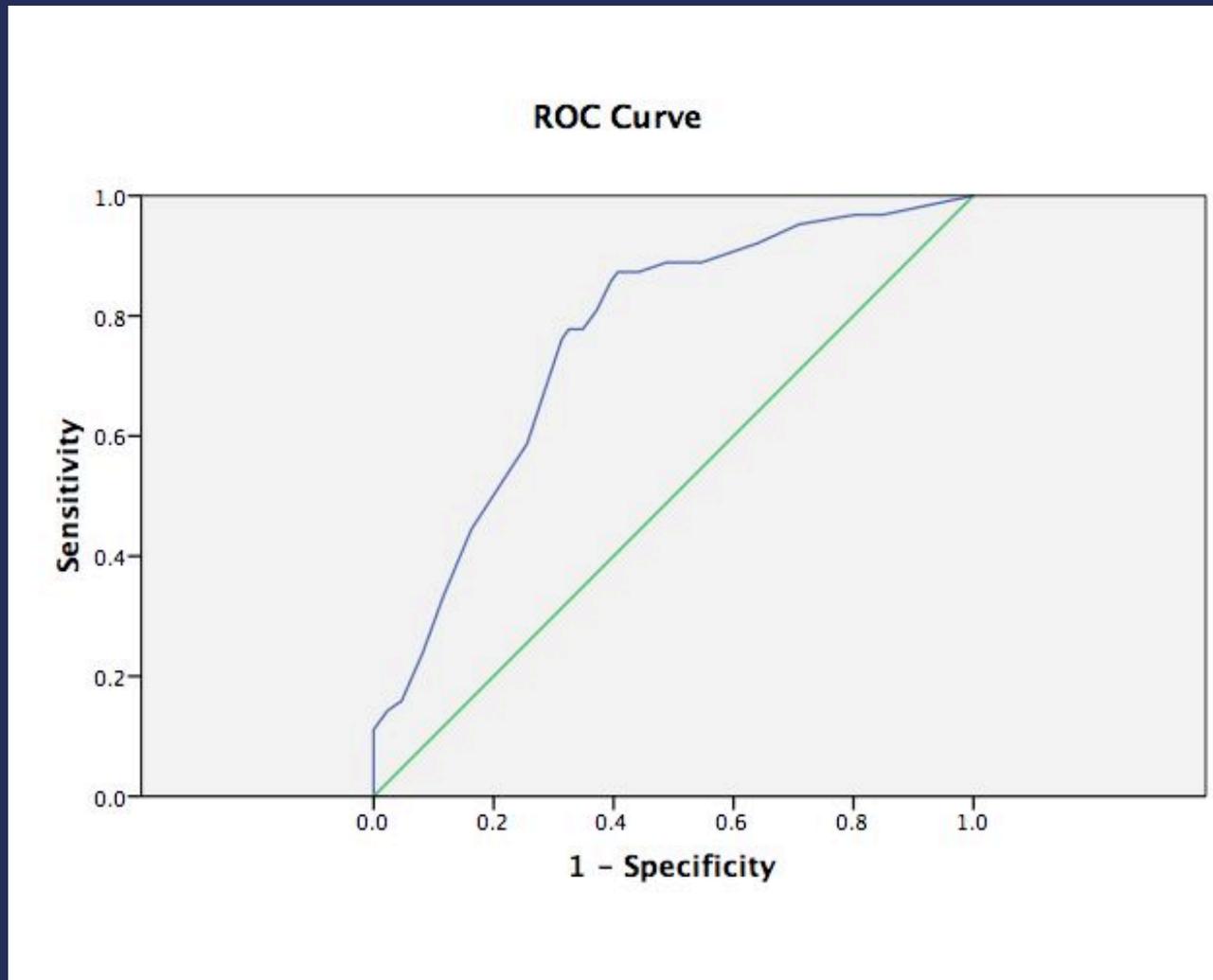
Comparison of screens for predicting *any* Axis I disorder



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