Administrația Națională a Penitenciarelor

Correctional Service Canada

OPEN SOCIETY FOUNDATIONS

GRADO

DE MONTFORT UNIVERSITY LEICESTER

ICCV

Assessing risk of reoffending in Romanian prisons

SWIC Conference, Bucharest, 2/11/2017

Anamaria Szabo, Bogdan Voicu

Outline

- Risk of reoffending
- Assessment tools
- Design and validation
- The Romanian tool
- Method and data
- Findings
- Discussion
- Q & A

Risk of reoffending

Concept / Factors

Risk of reoffending and its measurement

- Risk of reoffending = the probability of committing a new offence
- Measuring the risk
  - Follows a ‘cumulative stochastic model’ (Helmus & Babchishin, 2017, 9)
  - The risk is a continuous construct
  - It depends on a variety of factors that contribute (non-deterministically) to increasing and decreasing the probability
  - It is not possible to be certain that a person will reoffend, unless and until the reoffending occurs and is evidenced
- Measuring reoffending
  - What indicators is used? In what stage of the criminal justice process?

Types of factors (I)

- **Risk factors**: that facilitate offending
  - *Static*:
    - Non-reactive, over which we cannot intervene, seen as historical
    - Also called "fixed markers"
    - E.g. age at first offence, previous sentences
  - *Dynamic*:
    - Reactive, over which we can intervene
    - Also called "criminogenic needs" (deficits in people's lives that favour offending)
    - E.g. offending peers, criminal thinking
    - Types:
      - "Variable marker": does not change with intervention, but naturally (e.g. age)
      - "Variable risk factor": can change with intervention, but does not influence risk (e.g. job)
      - "Causal risk factor": can change with intervention, usually influences risk (e.g. substance misuse)

Types of factors (II)

- **Protective**: that inhibit offending and facilitate desistance
  - Positive elements in people's lives
  - If included in risk assessment, can contribute to intervention plans
  - E.g. job, positive family bonds
  - Types:
    - "Promotive factor": Opposite to risk, decreases probability and predicts desistance as a general effect (e.g. educational achievement, good parental supervision)
    - "Protective factor": interacts with risk factors, nullifies its effect and predicts decrease in risk for certain groups (e.g. fewer siblings predicts lower risk for youth in poor housing)
  - The interaction effect:
    - "When a risk factor is present, the probability of offending decreases in the presence of a protective factor; when a risk factor is absent, the probability of offending does not decrease in the presence of a protective factor"

(Farrington, Ttofi & Piquero, 2016, 64)

Assessment tools

Roles / Generations / Models

The roles of assessment tools

- **To inform sentencing decisions for offenders with high risk**
  - Trial stage
  - Gives information to justify a severe punishment
- **To inform parole decisions for offenders with low risk**
  - Prison execution stage
  - Gives information to justify parole / early release
- **To inform intervention decisions**
  - Execution stage
  - Gives information to justify intensity and type of intervention

(Monahan & Skeem, 2016)

Generations (I)

- **First generation**
  - Based on clinical evaluations made by correctional staff
  - Risk assessment is subjective, autonomous, and varies among evaluators
- **Second generation**
  - Based on actuarial (mechanic) measurements
  - Include individual risk factors, predominantly static like offending history, and less dynamic factors like criminal thinking
  - Have a general prediction effectiveness, above clinical evaluations
  - Are useful to classify offenders and bring a marginal contribution to intervention planning and progress assessment

Generations (II)

- **Third generation**
  - Include both static and dynamic factors in the assessment
  - Factors are from different spheres of life, such as the job, family and friends
- **Forth generation**
  - Integrated intervention and monitoring systems, based on a large spectrum of risk and dynamic factors
  - Guide and monitors intervention and supervision from the entry to the exit point
  - Interconnects the work of professionals between different stages of the criminal justice process, from the community to custodial settings
  - Systems with electronic sofware connected via Internet or Intranet

Two models

Offender Assessment System (OASys)

- 1. Current offence (6 types of items)
- 2. Criminal history (10 items)
- 3. Attitudes (10 items)
- 4. Accommodation (5 items)
- 5. Relationships: family / marital (8 items)
- 6. Education and training (5 items)
- 7. Employability (6 items)
- 8. Financial management and income (6 items)
- 9. Lifestyle and associates (9 items)
- 10. Alcohol misuse (12 items)
- 11. Drug misuse (14 items)
- 12. Emotional / psychological factors (10 items)
- 13. Inter-personal behaviour (5 items)
- 14. Thinking style (10 items)

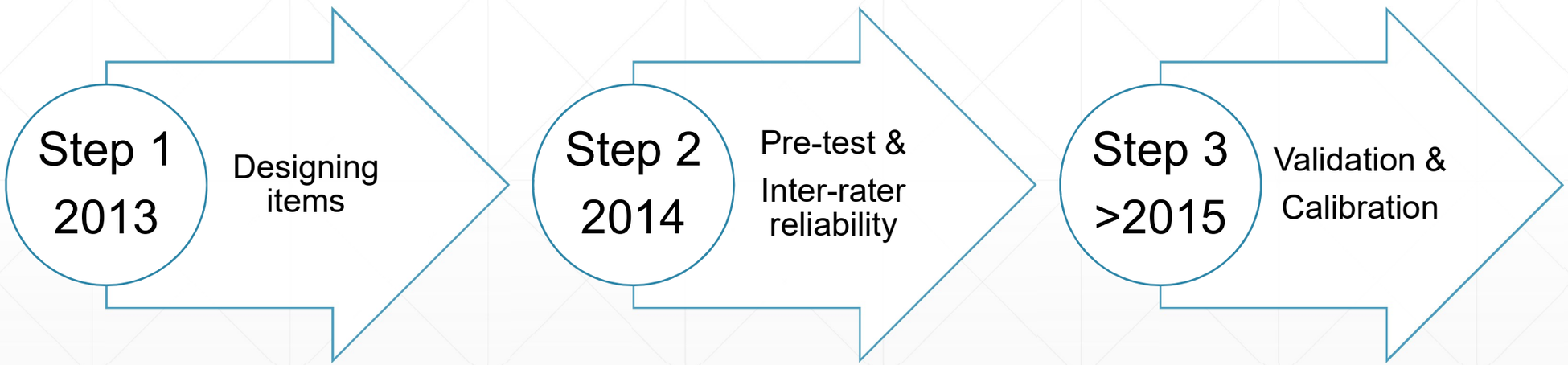
Level of Service Inventory-Revised (LSI-R)

- 1. Criminal history (8 items)
- 2. Education / Employment (9 items)
- 3. Financial (2 items)
- 4. Family / Marital (4 items)
- 5. Accommodation (3 items)
- 6. Leisure / recreation (2 items)
- 7. Companions (4 items)
- 8. Alcohol / drug problems (8 items)
- 9. Emotional / personal (4 items)
- 10. Attitudes (4 items)

Design and validation

Stages

Stages


Step 1
2013
Designing items
Step 2
2014
Pre-test &
Inter-rater reliability
Step 3
>2015
Validation &
Calibration

Designing items (2013)

Possible sources

- Current tools
- International tools
- Legal framework
- Prison staff

Key questions

- What is assessed?
- Who uses it?
- Who collects the data for it?
- How are data collected and used?

Pre-test & Inter-rater reliability

- Purpose
  - To check easiness of use, completion time and item clarity
- Elements
  - Sampling
  - Simultaneous data collection + feed-back from staff
  - Checking levels of trust per item
  - Redefining items with low trust levels

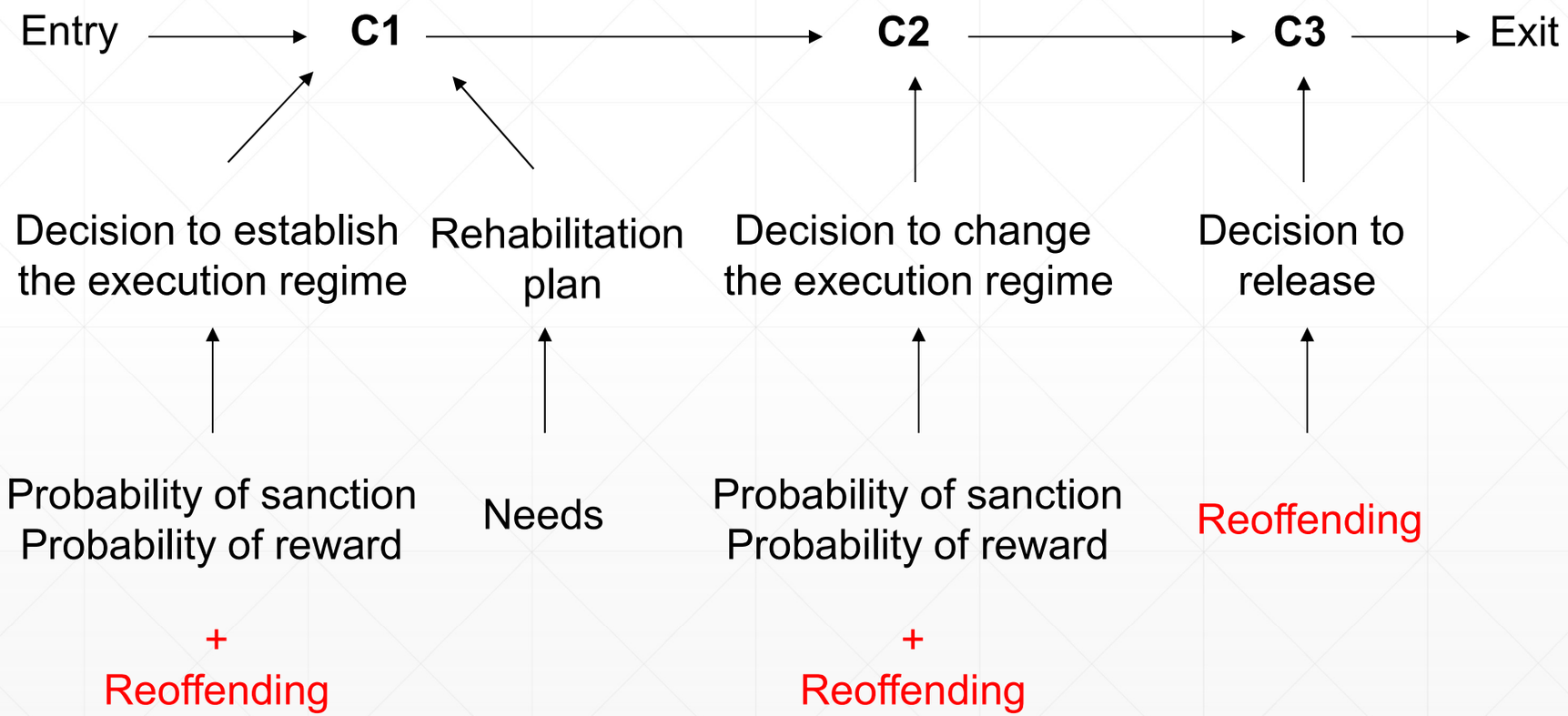
Validation & Calibration

- Purpose
  - To identify the statistical model of prediction
- Elements
  - Sampling / population
  - Collecting data on the assessment framework
  - Collecting data on reoffending
  - Building the statistical model
  - (Re)calibrating the weighting and checking for associations

The Romanian tool

Functionality / Prediction models / Prison Commissions

Functionality



Prediction models

- Two types of models were preferred

- Prediction models (logit)
  - Primary: decision to be released
  - Secondary: warnings on existing likelihood to be sanctioned/recompensed

- Tests of reliability/validity
  - Additional: needs for integration programs

Expectations

- (H1) The tool proves internal consistency of the decisions within the penitentiary system.

- (H2) Higher reliability at C1 and C2, given:
  - C3 relates to events outside the system
  - Overcrowding plays a role in quicker early/parole release

Method and data

Data

- Two types of data:
  - Collected in penitentiary, though a tailored tool, for each of C1-C3 commission.
    - Data collected in 2015. Assessment of release (for C3) in 2016 (various post-release durations)
    - Disadvantage: small samples (600). For C3: very short time after release

    - Hystorical records:
      - Advantage: longer time after release & very large samples (20.000)
      - Disadvantages:
        - very little info (mainly SES and sanctions/rewards)
        - Importantant changes in the patterns of warding rewards/panctions➔ decrease usages for current cohorts

Method

- Logistic regression
- Dependent variables:
  - Decision at C1 (Decision to establish the execution regime)
  - Decision at C2
  - Decision at C3 (risk of reoffending ➔ early release)

Findings

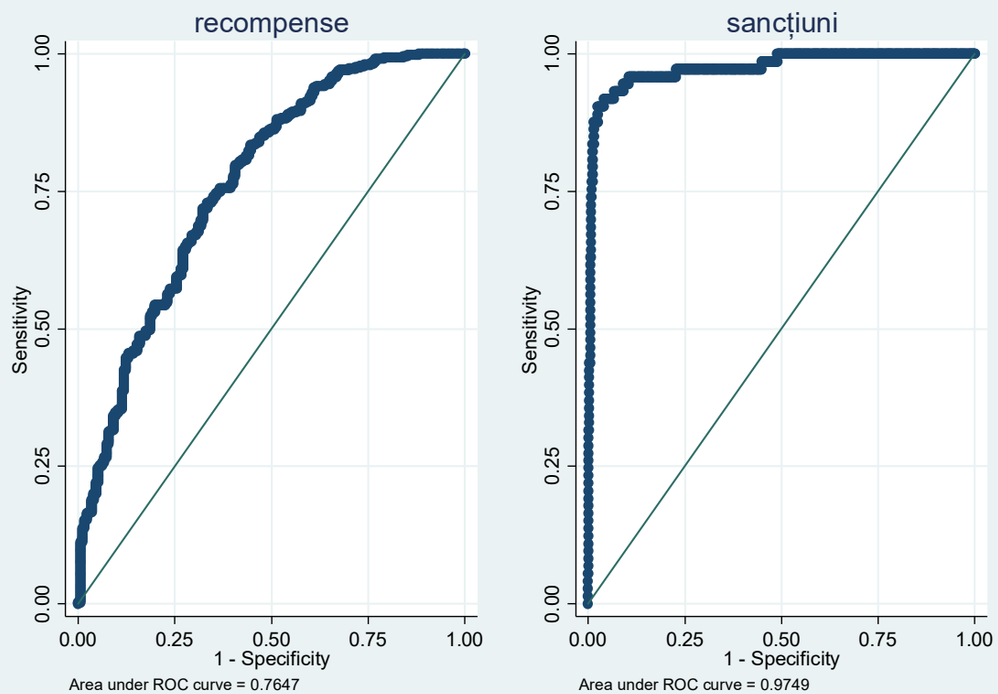
C1 / C2 / C3

DV	(Probability of…)	
	rewards	sanctions
Length of sentence (days)	1,00**	1,00
Executed sentence (days)	1,00	1,00
Age (years)	0,97**	1,00
Women	1,09	0,46
No previous offenses	1,43	0,57
Has previous conviction(s)	0,97	0,42
Number of credits in penitentiary	1,01*	
Rewards or credits from previous convictions	1,46	
Sanctions (current conviction)	0,10***	
Disciplinary sanctions (previous convictions)	0,90	1,81
Revocation of previous releases	1,00	1,35
Additional convictions when in penitentiary, but for offences when free	0,43	
Additional convictions when in penitentiary, for offenses in penitentiary	0,63	
Belongs to a clan/criminal group	0,47	2,38
Offended with accomplices	0,82	0,77
Offended with a criminal grup	1,92	7,14*
Education & skills	1,73***	0,62
Daily worker/grey market	1,23	0,75
Employee/Retired/Student	0,80	1,84
Has dependent kids	1,52*	
Constant income	1,35	0,65
Sociability	1,29†	
Limited work capacity	2,56†	0,25
Full work capacity	2,21†	0,28
Aggressiveness	0,91	1,33
De-classified		0,15
classified		0,21
Gravity of disciplinary misconduct, current conviction		18,12***
Escape/tentative for escape		4,82
N	631	636
Pseudo R-squared	0.19	0.66

† p<0.10, * p<0.05, ** p<0.01, *** p<0.001

Odd ratios

C1

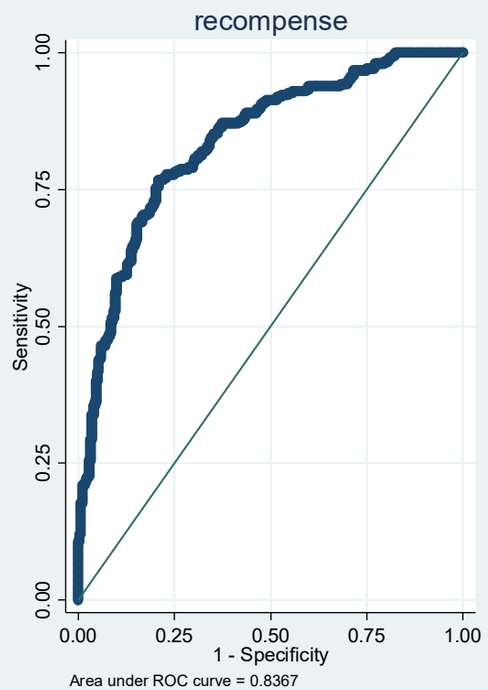


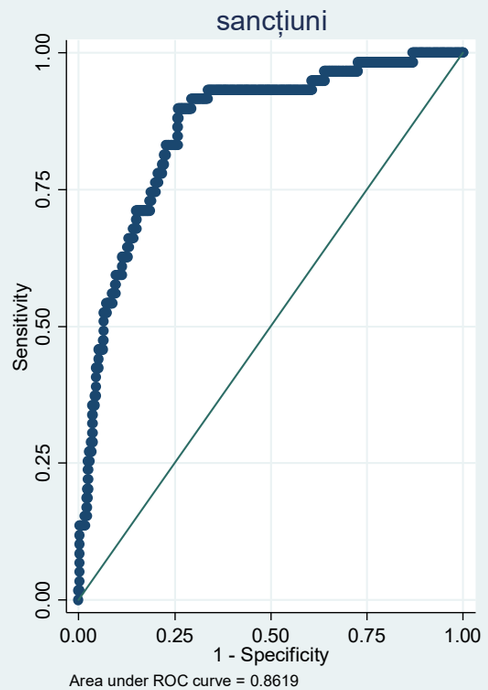
	Rewards	Sanctions
main		
The number of credits granted for work	1.001	
Was disciplinary sanctioned=1	0.926	
rewards - art68b (sanction cancelled)	1.288	1
rewards - art68c (more parcels)	11.43***	
Number of credits lost in total	0.983***	1.021***
Number of credits granted in total	0.998	0.985***
The level of violence of the offence	1.168	1.335
Offended with accomplices	0.950	0.807
Offended with a criminal grup	1.712	0.803
Work_withdrawn_Inmate_fault_No_sanctions=1	0.310*	3.446*
Intervention Plan Completed=1	1.575†	
Intervention_plan_Refused=1	0.452	2.647
Recidivist=1	1.215	1.663
has Criminal Record=1	0.571†	0.885
Age	0.993	0.981
Man	0.416**	0.888
Length of sentence - recalculated in days	1.000	1.000
regressive regime change	0.509†	1.834
Limited capacity	0.509	3.515
Full capacity	1.090	4.747
N	594	499
Pseudo R-squared	0.281	0.243

† p<0.10, * p<0.05, ** p<0.01, *** p<0.001

Odd ratios

C2





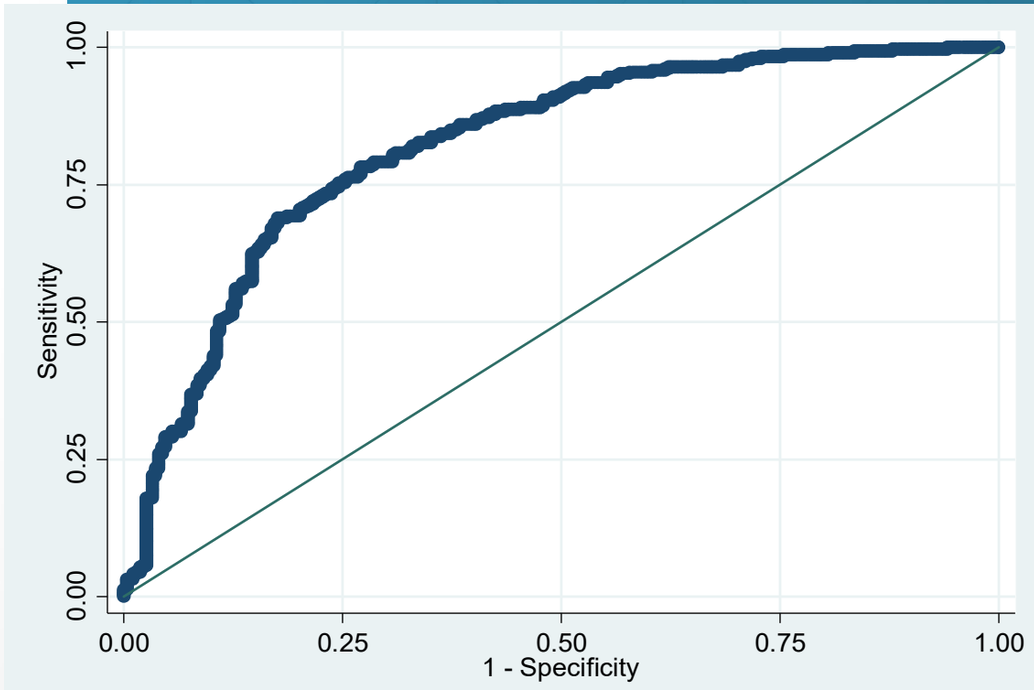
Man	**0.625**
Age	0.996
Length of sentence - recalculated in days	1.000*
Maximum security regime	0.981
Closed regime	0.669
Semi-open regime	0.922
First time C3	0.134***
recidivist	0.490
Previous offenses	0.730
Number of credits lost due to disciplinary sanctions	0.993**
Number of credits granted during the execution of th	1.001
Misconduct in penitentiary	0.843†
Has he/she previous revocation of parole?	0.923
With accomplices	1.051
Organized criminal group	1.508
Has he/she committed the same offense more than once	0.944
Offending pathway	1.006
The level of violence of the offence for which the i	1.491*
work withdrawal	0.990
refused to follow the recommendations of the individual	0.573
has worked unsupervised, in the community	0.858
Housing: safe	1.081
In the last 6 months, the inmate received packages?	2.092**
Income: safe	1.761
recompenses	1.022
N	585
Pseudo R-squared	0.243

† p<0.10, * p<0.05, ** p<0.01, *** p<0.001

Odd ratios

Dependent variable:
release decision

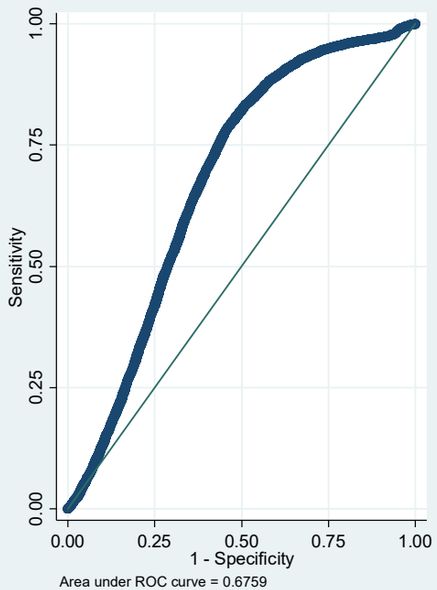
C3

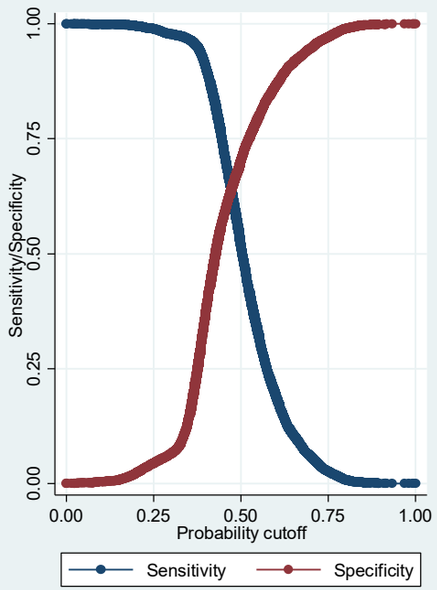


Dependent variable:
reoffending

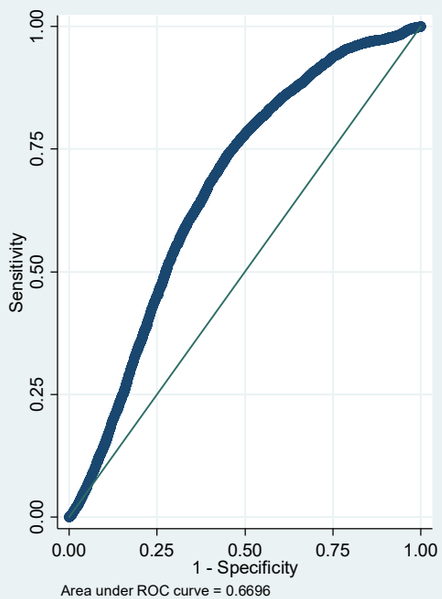
Parolees 2012-2013

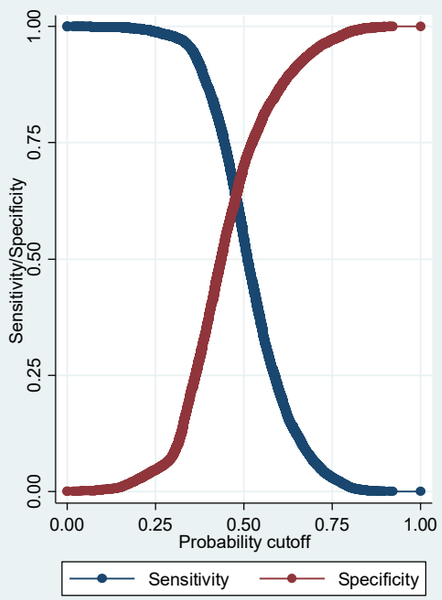
model R1b



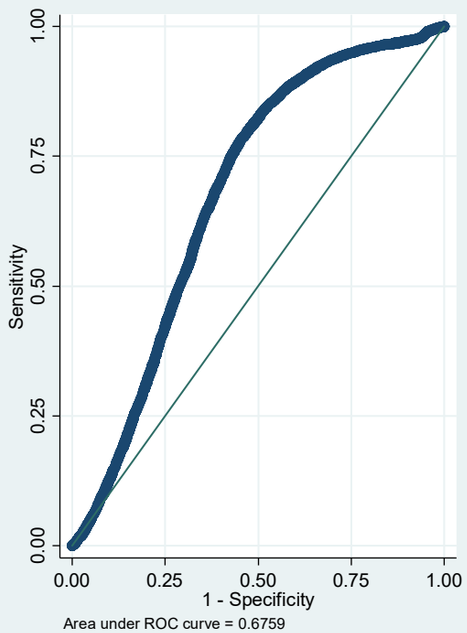


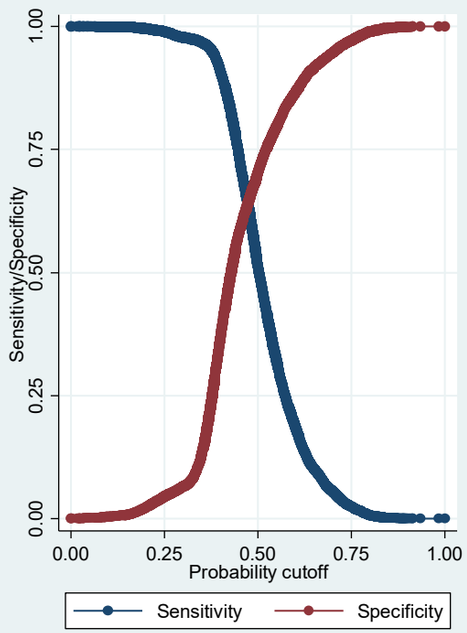
model R2





model R3





Dependent variable:
reoffending

Parolees 2012-2013

	R1	R1b	R2	R3
Woman	0.373***	0.365***	0.378***	0.373***
Age	1.044***	1.044***	1.047***	1.044***
time spent in prison (days)	1.000***	1.000***	1.000***	1.000***
Total # sanctions	1.033***	1.075*		1.076*
# sanctions – warnings			0.956†	
# sanctions - no access to leisure activities			1.038	
# sanctions - no parcel			1.017	
# sanctions - no visits			1.077***	
# sanctions – isolation			0.989	
# sanctions - no work			1.189**	
# sanctions - others			0.751***	
Total rewards	0.983*		0.987†	0.983*
# rewards - art. 98 alin (1) lit. c)	1.004	0.987***	1.004	1.004
# rewards - alin (1) lit. e)	0.928†	0.909*	0.937†	0.929†
# rewards - alin (1) lit. f)	0.615***	0.596***	0.620***	0.616***
Total misconducts				0.957
# easy misconduct behaviors		1.026		
# grave misconduct behaviors		0.890**		
# very grave misconduct behaviors		0.948		
Observations	22356	22356	22356	22356
Pseudo R-squared	0.043	0.044	0.047	0.043

† p<0.10, * p<0.05, ** p<0.01, *** p<0.001

Odd ratios

Discussion

- Decent reliability of the instrument
- The system reaches internal consistency
    - (i.e. it expresses a postmodern approach to detention)
- The effectivity of tools in the Romanian system is proven, and the lessons from other systems prove to be valid ➔ transferability of acquired knowledge
- Policy implications:
    - overcrowding and the threshold

?
Q
&
&
A
!