



The Predictive Power of Risk Assessments following Clinical Implementation

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Overview

- Background to research
- Research aim and objectives
- Sample demographics
- Predictive power of HCR-20
- Contribution of psychometric measures
- Conclusions to date
- Ongoing work

Background to research

- The assessment and understanding of psychiatric patients is crucial in the management of risk these patients pose to the public and staff working with them.
- Research and clinical practice favour a systematic risk assessment approach.
- Structured Professional Judgement tools such as the HCR-20 (Webster et al, 1997) are increasingly used by psychologists and other professionals.
- Advantage: increased focus on clinical factors and management issues thereby taking account of patients' changes in behaviour and cognition across time and setting.

Why another Risk Assessment study?

- Previous research based on retrospective, researcher-compiled risk assessments, often outwith the UK
- Research Gap: assess the predictive validity of risk assessment completed and used by clinicians in real-life settings

Research aims and objectives

- To examine the predictive validity of risk assessment tools (**HCR-20**, **SVR-20** both incl. the PCL-R/PCL-SV, and **RSVP**) in mentally disordered offenders in Scotland
- To identify whether psychometric measures such as impulsivity, unmet need, current psychiatric symptoms and imagined violence reflect, and contribute to risk assessments.
- To assess the impact of clinical implementation of risk assessments on incidents

Research sample

- Power calculation at power .80 required $n = 110$
- $N = 153$ were eligible for inclusion in research, of those $n = 115$ (approx. 75%) consented and completed first interview
- Of those approached for a follow-up interview, $n = 88$ (79%) agreed to participate
- Outcome data: incidents recorded in hospital wide DATIX system

Background characteristics

	Interviewees (n = 115)	Non-participants (n = 38)
Age	39 years (sd = 10.64)	40 years (sd = 8.33)
Time difference contact – first admission	4 ½ years (sd = 6.21)	5 years (sd = 5.7)
Number of previous admissions	5 (sd = 5.95)	4 (sd = 3.47)
Length of time spent in psychiatric care	3 ½ years (sd = 6.44)	2 years (sd = 3.89)
Number of previous convictions	15 (sd = 16.62)	15 (sd = 14.08)
Primary diagnosis: Schizophrenia	81% (n = 87)	75% (n = 29)
Known head injury	36% (n = 40)	48% (n = 18)
Previous violence in hospital other than tsh	<i>50% (n = 49)**</i>	<i>66% (n = 23)**</i>

HCR-20 at baseline

Interviewees	Non-participants
HCR-20 (n = 108)	HCR-20 (n = 36)
H = 15.59 (sd = 2.83)	H = 15.15 (sd = 3.68)
<i>C = 5.33 (sd = 2.36)**</i>	<i>C = 6.33 (sd = 2.25)**</i>
<i>R = 4.86 (sd = 2.45)**</i>	<i>R = 5.97 (sd = 2.91)**</i>
HCR-20 total = 25.78 (sd = 5.26)	HCR-20 total = 27.46 (sd = 5.88)

Outcome data

■ Incident

- any aggressive incident involving physical contact with a victim
- any sexual incident (incl exposure and touching)
- any episode of physical aggression towards property (incl fire setting)

■ Serious incident

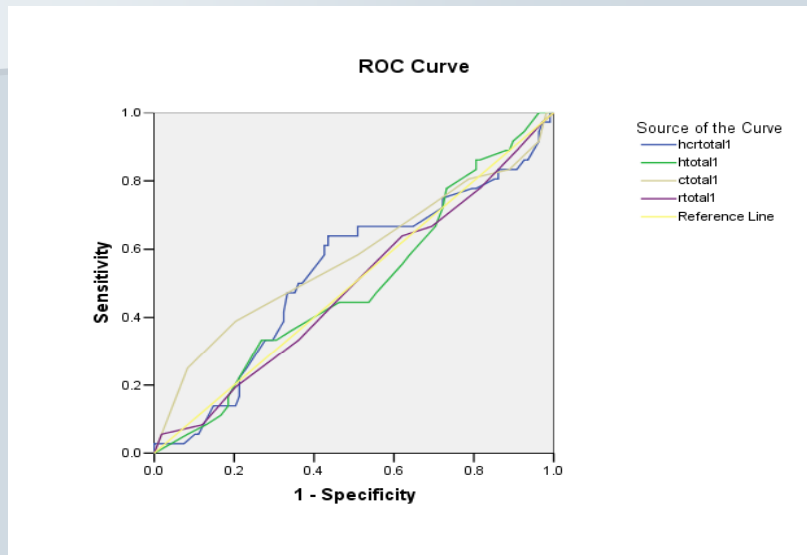
- any aggressive incident resulting in death or injury to the victim requiring hospital treatment
- any sexual incident involving contact with the victim
- any fire-setting

(Thomson et al, 2005)

Incidents pre-post risk assessment

		Interviewees
Pre Risk Assessment	Any incident	40 (36.4%)**
	Serious incident	4 (3.6%)
Post Risk Assessment	Any incident	26 (23.6%)**
	Serious incident	1 (0.9%)

Predictive validity of HCR-20



Psychometrics

	Interviewees (n = 115)
BIS-II	63.85 (9.84)
BIS motor	18.58 (4.26)
BIS cognitive	22.28 (3.78)
BIS non-planned	23.13 (4.78)
CANFOR-S	
Unmet needs	6.02 (sd = 3.22) (0 – 15)
Met needs	1.83 (sd = 1.94) (0 – 12)
Total needs	7.85 (sd = 3.53) (5 – 21)
SIV	53 (46.1%) **
BPRS	46.03 (sd = 10.33) **

Conclusions to date

- Predictive validity of the HCR-20
- Contribution of psychometric measures
- Shift in research focus from risk prediction to risk management (e.g. Doyle & Duffy, 2006)
- Limitations

Ongoing work

- Review of patient case notes
- Reconviction data (SCRO)
- Analysis of pilot study DASA-IV
- Follow up interviews and risk assessments

