Offence type and treatment outcome in a therapeutic community prison: Which offenders show most reductions in criminogenic risk?

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Offence type and treatment outcome in a therapeutic community prison: Which offenders show most reductions in criminogenic risk?

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Aims

- To explore whether the TC is effective in reducing risk in general
- To investigate whether different offence groups show differences in how they respond to treatment
- To examine the impact of time in treatment
- To explore the utility of psychometric tests as measures of treatment outcome
Approaches to measuring outcomes

- Limitations of using reconviction as an outcome measure
- Other attempts include prison behaviour, treatment compliance etc
- Substantial evidence to support psychometric measures of dynamic risk (Palmer & Hollin 2003, Walters 1997, 2002)
- Newton (2000) – they can discriminate between offender populations, psychometric evidence pre intervention scores predictive of future recidivism
Psychometric evidence as a measure of change

- Do reductions in dynamic risk lead to reductions in recidivism?

- Pre-treatment scores fared better than the post-treatment scores, supporting previous findings (e.g. Hanson & Wallace-Capretta, 2000)

- Is change on psychometrics linked to recidivism? Relatively limited research
  - Friendship et al (2003) ‘as far as dynamic risk factors are concerned, evaluation (of treatment) studies have yet to assess their contribution to reconviction’
Psychometric evidence as a measure of change

- Some studies demonstrated a link between psychometric change and reduced recidivism with sex offenders (Beech et al 2001)

- CSC treatment change on psychometrics linked to reductions in recidivism (Harkins, 2008)
Wakeling et al (2011)

- 3773 sex offenders
- Little difference between the predictive power of pre, post, and average psychometric scores
- Pre-treatment scores fared better than the post treatment scores
- Offenders who fell into the improved categories often had the highest recidivism rates
- Static risk may be a more powerful predictor of recidivism than dynamic risk factors as measured psychometrically
- Overall, treatment change rating was associated with reduced recidivism
- Does not support hypothesis that positive treatment changes on the psychometrics will be associated with reduced recidivism
Outcomes in TCs

Previous research within TCs has found:

- Consistent reductions in risk (Thornton et al 1996, Shuker & Newton, 2008)
- Reduced rates of reconviction (Taylor, 2000)
- Lower numbers of prison adjudications (Newton, 2010)
- Improved interpersonal relating (Birtchnell et al, 2009, Newberry & Shuker, 2010)
- Need to develop an effective means of measuring therapeutic change
- Newton & Shuker (unpublished) preliminary findings find no support for hypothesis that improved score in measures of risk are associated with reduced rates of recidivism
Issues with psychometrics

○ Is the assumption that attitudes assessed in one context are predictive of long term future behaviour within different contexts sustainable?

○ Are attitudes the best means of predicting long term behaviour? (Eagly & Chaiken 2012)

○ Behaviour and attitude are to a considerable degree situational specific or at least best construed as an interaction between the individual and social context (Mischel & Shoda, 1995)

○ How far are relevant as measures of changes in dynamic risk

○ Less strength has been found in the relationship between attitude and future criminal behaviour (Hollin, 2003; Walters, 1998).
Method
Participants

- 2,282 male offenders admitted to a Category B therapeutic community (TC) prison between 1993 and 2015

- Mean age 34.92 (SD = 8.96, range 20-73)

- 81.5% White British

- Offenders classified on the basis of offending behaviour:
  - Murder (n = 594)
  - Violence (n = 561)
  - Robbery (n = 460)
  - Sexual (n = 377)
  - Acquisitive (n = 128)
Measures

- Hostility and Direction of Hostility Questionnaire (HDHQ; Caine, Foulds, & Hope, 1967)
- Eysenck Personality Questionnaire-Revised (EPQ-R; Eysenck & Eysenck, 1991)
- Culture-Free Self-esteem Inventory Second Edition (CFSEI; Battle, 1992)
- Blame Attribution Inventory (BAI; Gudjonsson, 1984)
Measures (continued)

- Psychological Inventory of Criminal Thinking Styles (PICTS; Walters, 1995)
  - Mollification
  - Cut-Off Thinking
  - Entitlement
  - Power Orientation
  - Sentimentality
  - Superoptimism
  - Cognitive Indolence
  - Discontinuity

(plus Confusion & Defensiveness)
Person’s Relating to Others Questionnaire (PROQ3; Birtchnell et al., 2010)

- Total Negative Relating
- Upper Neutral
- Upper Close
- Neutral Close
- Lower Close
- Lower Neutral
- Lower Distant
- Neutral Distant
- Upper Distant
Procedure

- All measures completed by prisoners at admission and discharge (typically 18 – 24 months)

- Multiple imputation (MI) used to deal with missing data (some offenders did not complete measures on discharge)

- MI advantageous over methods of single imputation
  - Replaces each missing value with values generated from the distribution of the missing data, given observed data (Salim et al., 2008)
Results
Do offence groups differ in terms of change on the scales?

- Comparison of mean scores at admission and discharge for each of the scales for each offence group (paired $t$-tests)

- All groups demonstrated significant change on at least some of the scales
All groups demonstrated significant reductions on these scales

- All 3 Hostility scales
- Psychoticism, Neuroticism, Addiction, Criminality, Impulsiveness, Venturesomeness
- External Blame Attribution & Mental Element Attribution
- All 4 Self-esteem scales
- Cut-off Thinking, Cognitive Indolence, Discontinuity
- Total Negative Relating
- Upper Closeness
- Neutral Closeness
- Lower Closeness
- Lower Neutral
- Neutral Distance
- Upper Distance

But all groups INCREASED their score on the EPQ-R Lie scale and PICTS Defensiveness ‘fake good’ scales
Some groups demonstrated significant change on these scales

- **Extraversion**
  - Only sex offenders increased their score

- **Guilt Attribution**
  - Murder/sex reduced guilt whereas acquisitive/robbery increased guilt

- **Mollification**
  - All groups except violent offenders reduced their tendency to justify offending

- **Entitlement**
  - Only acquisitive/robbery reduced their score

- **Power Orientation**
  - Only violent/sexual reduced their score

- **Sentimentality**
  - Only murder/acquisitive reduced their score

- **Upper Neutral relating (pompous, dominating)**
  - Only acquisitive reduced their score

- **Lower Distant relating (acquiescent, withdrawn)**
  - Only murder/sexual/acquisitive reduced their score
None of the groups demonstrated significant change on these scales

- Empathy
- Superoptimism
## Summary of change for different offence groups

<table>
<thead>
<tr>
<th>Group</th>
<th># scales desirable change</th>
<th># scales no significant change</th>
<th># scales undesirable change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquisitive</td>
<td>30</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Sexual</td>
<td>30</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Robbery</td>
<td>29</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Murder</td>
<td>29</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Violent</td>
<td>27</td>
<td>10</td>
<td>2</td>
</tr>
</tbody>
</table>
Clinically significant change

- Paired t-tests do not consider whether an individual has a functional or a dysfunctional score on a scale to begin with.

- Combining offenders with functional and dysfunctional scores at admission can produce misleading results (Nunes et al., 2011).

- Therefore important to assess whether offenders move from a dysfunctional score to a functional score on a given scale.
Clinically significant change analysis (Jacobson et al., 1984; Jacobson & Truax, 1991) was conducted.

- A cut-off score is used which reflects a midpoint between typical scores seen in functional and dysfunctional groups.
  - Norms obtained from prior studies.

- These cut-off scores were used to differentiate functional and dysfunctional scores on each of the scales.
Example: HDHQ Total

Functional score: 9.84
Dysfunctional score: 24.07 (Maiuro et al., 1988)
Cut-off (C) = 11.53 so even at discharge none of the groups reached a functional score:

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean on Admission</th>
<th>Mean on Discharge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquisitive</td>
<td>27.39</td>
<td>17.57</td>
</tr>
<tr>
<td>Sexual</td>
<td>23.29</td>
<td>16.47</td>
</tr>
<tr>
<td>Robbery</td>
<td>25.86</td>
<td>17.13</td>
</tr>
<tr>
<td>Murder</td>
<td>21.88</td>
<td>16.40</td>
</tr>
<tr>
<td>Violent</td>
<td>24.70</td>
<td>17.12</td>
</tr>
</tbody>
</table>
Clinically significant change

Using the calculated cut-off for each scale the proportion of prisoners in each offence group were calculated who were:

- Functional > Functional (normal at both points)
- Dysfunctional > Functional (improved)
- Dysfunctional > Dysfunctional (resistant to change)
- Functional > Dysfunctional (deteriorated)
Murder

Most functional > functional (normal) on:
- Guilt Attribution 88%
- External Blame Attribution 71%
- Total Negative Relating 64%
- Upper Neutral Relating 58%
- Upper Close Relating 56%
- Neutral Close Relating 54%
- Upper Distant Relating 52%
- Psychoticism 54%
- Power Orientation 59%
- Mollification 51%
Murder

Most dysfunctional > functional (improvement on):  
- Total Self-esteem 41%  
  (higher on discharge)

Most dysfunctional > dysfunctional (resistant) on:  
- Total Hostility (76%)  
- Mental Element Attribution (65%)  
- Intropunitive Hostility (63%)

Most functional > dysfunctional (deterioration) on:  
- Lower distance 20%  
  (became more acquiescent, subservient, withdrawn)
Violent

Most functional > functional (normal) on:
- Guilt Attribution 73%
- External Blame Attribution 61%
- Total Negative Relating 64%
- Upper Neutral Relating 58%
- Upper Close Relating 55%
- Neutral Close Relating 53%

Most dysfunctional > functional (improvement) on:
- Total Self-esteem 47%
Violent

Most dysfunctional > dysfunctional (resistant) on:
- Total Hostility 83%
- Intropunitive Hostility 69%
- Mental Element Attribution 57%

Most functional > dysfunctional (deterioration) on:
- EPQ-R Lie scale 24%
Robbery

Most functional > functional (normal) on:
- Guilt Attribution 62%
- External Blame Attribution 68%
- Total Negative Relating 57%
- Upper Neutral Relating 53%
- Neutral Close Relating 52%

Most dysfunctional > functional (improvement) on:
- Neutral Distance 48%
  (became less suspicious, uncommunicative and self-reliant)
Robbery

Most dysfunctional > dysfunctional (resistant) on:
- Total Hostility 87%
- Intropunitive Hostility 63%
- Extrapunitive Hostility 55%

Most functional > dysfunctional (deterioration) on:
- EPQ-R Lie scale 27%
Sexual

Most functional > functional (normal) on:
- Guilt Attribution (93%)
- External Blame Attribution (98%)
- Total Negative Relating (53%)
- Upper Neutral Relating (56%)
- Upper Close Relating (51%)
- Upper Distant Relating (51%)
- Mollification (52%)
- Psychoticism (50%)
- Power Orientation (50%)

Most dysfunctional > functional (improvement) on:
- Total Self-esteem 48%
Sexual

Most dysfunctional > dysfunctional (resistant) on:
- Total Hostility 74%
- Intropunitive Hostility 65%
- Extrapunitive Hostility 43%

Most functional > dysfunctional (deterioration) on:
- EPQ-R Lie scale 22%
Acquisitive

Most functional > functional (normal) on:
- Guilt Attribution (63%)
- External Blame Attribution (70%)
- Total Negative Relating (52%)
- Upper Neutral Relating (52%)

Most dysfunctional > functional (improvement) on:
- Total Self-esteem 58%
Acquisitive

Most dysfunctional > dysfunctional (resistant) on:
- Total Hostility (89%)
- Intropunitive Hostility (79%)
- Extrapunitive Hostility (57%)

Most functional > dysfunctional (deterioration) on:
- EPQ-R Lie scale (28%)
Time in treatment

- Time in treatment sig. related to 30 of the 39 scales

- The strongest relationship was with:
  - Total Hostility
  - Intropunitive Hostility
  - Extrapunitive Hostility
  - Psychoticism
  - e.g. offenders (total sample) who were Dysfunctional > Functional stayed significantly longer in treatment (M = 38 mths) than those who were Functional > Dysfunctional (M = 29 mths)

- No relationship between time in treatment and:
  - EPQ-R Lie, PICTS Defensiveness, Venturesomeness, Personal Self-esteem, Upper Close relating, Lower Neutral, Lower Distance, and Neutral Distance
Conclusions

- Different offence groups demonstrate significantly different levels of change on criminogenic risk markers.
- These differences still exist even when time in treatment is controlled for.
  - Murder/sexual have similar deficits/changes.
  - Robbery/violent/acquisitive have similar deficits/changes.
- Empathy and Superoptimism the most resistant to change overall.
Conclusions

- **However** - All groups showed an increase in lie/defensiveness

- Acquisitive offenders showed the most movement from dysfunctional to functional on guilt

- But most movement from functional to dysfunctional on lie scale
Conclusions

- Study demonstrates potential utility of psychometrics as measures of risk
- Less confidence that we can rely on them as measures of change
- Develop offence paralleling, behaviourally based measures of clinical change
Thank you

- Any questions?

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