### Impact case study (REF3b)

**Institution:** Newcastle University

**Unit of Assessment:** UoA4

**Title of case study:** Introduction of a policy of mandatory polygraph assessment of high-risk sex offenders on parole in England and Wales

#### 1. Summary of the impact

Since 2001, Professor Grubin has led trials to test whether polygraph assessment could help case officers manage high-risk sex offenders released on licence in England and Wales. A three-year study of mandatory assessment which ended in 2012 demonstrated conclusively that polygraph testing helped case managers evaluate the risk posed by offenders and decide how best to protect the public from harm. A policy of mandatory polygraph assessment of all high-risk sex offenders on parole in England and Wales was approved by ministers in summer 2012, and procurement is underway for a national polygraph testing service for high-risk sex offenders.

#### 2. Underpinning research

**Key Newcastle University researcher**

(Where people left/joined the university in the period 1993-2013, years are given in brackets)

- Professor Don Grubin, Professor of Forensic Psychiatry (1997 onwards)

**Background**

Polygraphy is widely used in the US for the treatment and supervision of sex offenders. Prior to the Newcastle research, however, it was not used in the UK for that purpose. The academic community here were mostly sceptical about the accuracy and reliability of polygraphy. They considered many of the studies of the technique carried out in the US to be of poor quality: most of the studies were descriptive in nature, not properly controlled interventional studies, and in the one study that did include a comparison group the implementation of testing was poor. Offenders were often tested only at intervals of 18 months, and many were not tested at all because of a lack of resources.

**Research**

In 2001, Grubin led a small study of 32 offenders for the UK Home Office to test the utility of polygraph assessment of the UK post-conviction sex offender population. The results showed that voluntary polygraph testing, compared with no testing, was associated with more clinically relevant disclosures to case managers and a reduction in the amount of high-risk behaviour by offenders (R1 and R2).

On the basis of those results, the Home Office funded a larger trial which began in September 2003. Participation by offenders was again voluntary. It involved 347 offenders (43% of those eligible) from ten probation areas in England. Outcomes were compared with those of offenders in four probation areas where polygraph assessment was not introduced. For the polygraph-assessed group, case managers reported that new disclosures relevant to supervision were made in approximately 70% of first tests – a significantly higher rate of disclosure than that which occurred in the non-polygraphed group over the same period. The number of management and treatment changes in the polygraphed group was also significantly higher than in the control group. A report on the findings was published by the Home Office in July 2006 and was published later in a research journal in September 2010 (R3).

#### 3. References to the research

(Newcastle researchers in bold. Citation count from Scopus, July 2013)

**R1. Grubin D, Madsen L, Parsons S, Sosnowski D, Warberg B (2004).** A prospective study of...
the impact of polygraphy on high-risk behaviors in adult sex offenders. *Sexual Abuse: A Journal of Research and Treatment* 16(3):209-222. DOI: 10.1023/B:SEBU.0000029133.78168.ab. **22 citations.** (Grubin is the first and corresponding author. Sosnowski and Warberg (SOS Polygraph Services Inc., GA) were polygraph examiners and were involved in the design of the study and collection of data.)


Select research grants


4. Details of the impact

Pathway to impact

Grubin’s 2003–2006 study carried out for the Home Office, in which offenders were tested voluntarily (R3; results reported to government in July 2006), informed the Child Sex Offender Review of 2006, which recommended that a trial of mandatory polygraph testing be carried out (Ev a and Ev f). Necessary changes were made to the Offender Management Act 2007 (to authorise mandatory testing), and in April 2009 the National Offender Management Service began a three-year pilot study of mandatory polygraph assessment of high-risk sex offenders on parole (Ev a and Ev b). The Head of Public Protection Partnerships at the Ministry of Justice has confirmed in a statement that:

“...without Professor's [sic] Grubin's research it is unlikely that the CSOR [child sex offenders review] would have been aware of the potential role of polygraphy in managing offenders nor is it [the mandatory polygraph trial] likely to have become a manifesto commitment” (Ev a).

The aim of the trial was to evaluate whether mandatory testing, like voluntary testing, would be associated with higher rates of clinically significant disclosures by offenders to their case managers and whether it would lead to an increase in subsequent actions by supervising officers.

The testing arm of the mandatory polygraph trial was led by Grubin, and he was also a member of the research steering group (because of his knowledge of the practicalities of testing and the kinds of data that should be collected). The pilot began in April 2009 in the East Midlands and West Midlands probation regions. The comparison areas, where no testing took place, were the Yorkshire & Humberside and North West regions (Ev a and Ev c). A total of 332 offenders received a polygraph test over the course of the trial; they were compared with 303 individuals in the comparison areas who did not. Formal evaluation of the pilot study was carried out independently by the University of Kent between April 2010 and December 2011, and the final report was published by the Ministry of Justice in July 2012 (Ev c).

The mandatory polygraph trial achieved similar outcomes to the voluntary trial. The researchers found that the number of clinically significant disclosures made by offenders in the polygraph-tested group was significantly higher than that made by offenders in the non-tested group (2.60 and 1.25 mean disclosures per offender respectively). Depending on the seriousness of the
Disclosure, a range of actions were taken, including recall to prison. In the absence of disclosures, whether an offender passed or failed a test also had an impact on management – for example, a non-deceptive test outcome provided reassurance regarding case management and risk assessment, while a test failure helped focus supervision towards problematic areas or led to increased attention being given to the offender by hostel workers or the police. The trial therefore demonstrated that polygraph testing increased the number of preventative actions taken by offender managers to protect the public from harm (see table below).

Adapted from Table 3.10 and Appendix 3 (further statistical information) in “The evaluation of the mandatory polygraph pilot” (Ministry of Justice research series, July 2012). (Ev c.)

<table>
<thead>
<tr>
<th>Actions taken by offender managers as a result of clinically significant disclosures</th>
<th>Polygraph group (n = 332)</th>
<th>Non-polygraph group (n = 303)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decreased risk assessment</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>Increased risk assessment</td>
<td>39</td>
<td>23</td>
</tr>
<tr>
<td>Decreased supervision / controls</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Increased supervision / controls</td>
<td>83</td>
<td>49</td>
</tr>
<tr>
<td>Changed focus of supervision</td>
<td>266</td>
<td>181</td>
</tr>
<tr>
<td>Informed MAPPA (Multi-Agency Public Protection Arrangements)</td>
<td>94</td>
<td>35</td>
</tr>
<tr>
<td>Warning issued to offender</td>
<td>66</td>
<td>26</td>
</tr>
</tbody>
</table>

The odds of reporting at least one action of increasing supervision/controls in the polygraph group was 1.6 times greater (CI = 1.0, 2.6) than in the comparison group.

The odds of changing the focus of supervision in the polygraph group was 2.9 times greater (CI = 2.0, 4.0) than in the comparison group.

The odds of issuing a warning to an offender in the polygraph group was 2.7 times greater (CI = 1.5, 4.6) than in the comparison group.

The Ministry of Justice report on the trial concluded:

“...it [polygraph testing] increased the likelihood of preventative actions being taken by offender managers to protect the public from harm” and “the polygraph is a suitable tool for eliciting CSDs [clinically significant disclosures] for all types of sexual offender” (Ev c).

On the basis of the trial results, ministers decided in summer 2012 that probation trusts in England and Wales should use polygraph assessment on a mandatory basis to manage the most serious sex offenders that have been released on licence (Ev a and Ev d).

Implementation of the policy

Secondary legislation has now been passed, enabling polygraph conditions to be inserted into the release licences of offenders (Ev g). Other aspects of policy implementation are also underway: a Polygraph Implementation Board has been established, and it has been given the tasks of procuring a provider of polygraph testing and organising training programmes for staff (Ev a). On 26th February 2013 the Ministry of Justice published a prior information notice, indicating its intention to start the following month a formal procurement exercise for the polygraph testing service. The value of the contract is estimated to be £2.75 million and it is expected to last four years. At least 750 offenders per year (those on parole and perceived as high risk) are expected to undergo polygraph testing, with testing occurring on average every six months (Ev e). Based on the trial data, the policy expectation is that polygraph assessment will improve markedly the quality of supervision provided by probation offender managers: supervision and monitoring will be more focused and increased risk will be identified before a new offence is committed.
5. Sources to corroborate the impact


Ev d. BBC News article (20th July 2012): Lie detectors for sex offenders ‘to be rolled out’. http://www.bbc.co.uk/news/uk-18916405


Ev g. UK Parliament Hansard. HL 24 July 2013, vol. 747, col. 1317. (Lords approval of statutory instrument.)