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Polygraphs and sex offenders: The truth is out there

Daniel Marshall

81 Dots, United Kingdom

Terry Thomas

Leeds Beckett University, United Kingdom

Abstract

Polygraphs (or lie detectors) have been introduced into the UK for the first time despite continuing concerns about their reliability and the ways in which they will be deployed. The police are enabled to use them on a 'voluntary' basis and the probation service on a 'mandatory' basis if their use has been made a condition of post-custodial supervision. This article seeks to bring the polygraph story up to date and pose the questions that are still unanswered as the use of the polygraph begins.

Keywords

lie detectors, parole conditions, polygraphs, sex offenders

Introduction

The probation service started mandatory polygraph testing for high risk sex offenders under their supervision in October 2014; supervised tests were reportedly started in London and Leeds in August 2014 (Bowcott, 2014a). The law was implemented to allow such testing from 6 January 2014 following successful trials. The police have also started using polygraphs but, for now, they have to use them on a voluntary basis and only with the person's consent. Jeremy Wright, the Under-

Corresponding Author:

Daniel Marshall, 81 Dots and Visiting Scholar, Institute of Criminology, University of Cambridge, United Kingdom.

Email: djm210@cantab.net

Secretary of State at the Home Office has declared the polygraph to be a new weapon with which to manage sex offenders in the community:

This government is introducing lie detector tests for high risk sexual offenders, as well as satellite tagging to track their movements. We are determined that the UK has one of the toughest regimes in the world for managing sex offenders, to stop reoffending and to protect victims. (Ministry of Justice, 2014)

This article considers the use of polygraphs in the criminal justice system.

The polygraph is often described as a lie detector. Its use is based on the notion that lying induces a 'stress response' in the automatic nervous system, that is largely outside conscious control and which regulates the body's internal environment. The subject has a number of sensors linked to his or her body to record the physiological changes said to determine whether someone is telling the truth. These include sensors measuring blood pressure, breathing, and perspiration linked respectively to the upper arm, chest and fingers. The basis of the polygraph examination involves individuals being asked a series of questions while activity in these systems is recorded, with certain reactions said to be indicative of deception or causing 'involuntary responses' (see, for example, BBC, 2014a). In the United States polygraph testing has been used widely in the treatment and supervision of sex offenders. McGrath et al. (2007) found that nearly 80 per cent of community treatment programmes for adult male sex offenders in the United States, and over half of residential programmes, make use of the technique. A definitive review carried out by the National Research Council (2003) in the United States concluded that the accuracy of polygraph testing is likely to be in the region of 80–90 per cent.

The Royal Commission on Criminal Procedure of 1981 had considered the introduction of polygraphs into England and Wales and members of the Commission had even seen them in action during visits to the USA. Their final conclusion, however, was that the polygraph's 'lack of certainty from an evidential point of view told against its introduction in this country for the purpose of court proceedings' (Royal Commission on Criminal Procedure, 1981: para. 4.76). A report from the British Psychological Society in 1986 also argued that the polygraph was unscientific (British Psychological Society, 1986) and the 1993 Royal Commission on Criminal Procedure did not mention polygraphs at all (Royal Commission on Criminal Procedure, 1993). For a useful short history of the polygraph see Wilcox and Madsen (2009).

The probation officer's use of the polygraph

In 2003 the probation service began testing polygraphs on volunteer supervisees (Hansard HC Debates, 2005). Probation officers reported that this so-called Post-Conviction Sex Offender Testing (PCSOT) in England revealed that new disclosures relevant to treatment or supervision were made in 70 per cent of tests, compared with 14 per cent of non-polygraphed offenders. The odds of a polygraphed offender making a disclosure relevant to his treatment or supervision were

14 times greater than they were for non-polygraphed ones. When probation officers were asked about the impact of testing on treatment and supervision, polygraphy was rated as being 'somewhat' or 'very' helpful in over 90 per cent of cases (Grubin, 2006).

The evaluation from the voluntary PCSOT was sufficient to convince the government that mandatory polygraph testing could be introduced and provisions were included in the Management of Offenders and Sentencing Bill 2005 to allow a polygraph testing condition to be imposed on the licences of certain sex offenders (HL Bill 16 of 2004–5, clauses 47–50). The Bill did not become law when it 'fell' at the General Election but the idea did not go away.

A review of services to protect children from sex offenders recommended that pilot schemes should test the use of polygraphs as a 'risk management tool' (Home Office, 2007: 23) and the Labour Party manifesto for the forthcoming election promised that:

[by] 2007 every offender will be supervised after release... and we will test the use of compulsory lie detector tests to monitor convicted sex offenders. (Labour Party, 2005: 48)

Back in power the Labour government re-introduced the legal provisions in the Offender Management Act 2007, ss28–30.

The 2007 Act allowed for people over 18 convicted of sexual offences and on post-custody licences to have conditions written into those licences requiring them to attend for polygraph testing. Section 30 of the Offender Management Act prevented any information obtained from a polygraph test from being used in criminal proceedings against the offender or for any re-call or breach proceedings. The law would not be implemented immediately but only after further pilot studies had been carried out.

Mandatory polygraph testing for post-custodial sexual offenders was piloted between April 2009 and October 2011 in the East and West Midlands' probation regions. Equipment and training were provided by the University of Newcastle and an evaluation was commissioned from the University of Kent. New statutory rules were published to guide the practitioners (The Polygraph Rules, 2009).

The evaluation study found that of the 300 sex offenders who took the tests twice as many made 'clinically significant disclosures' to probation staff such as admitting to contacting a victim or entering an exclusion zone, or thoughts that could suggest a higher risk of reoffending (Gannon et al., 2012: 12). It was also found that many of the sex offenders 'made disclosures because they believed so strongly in the powers of the polygraph'; in other words it was not the test at all that made them disclose and many of these disclosures even took place during the pre-polygraph interview before the test itself was carried out (Gannon et al., 2014).

The arrangements for mandatory polygraph tests to be rolled out across the country were finalized in July 2013. Some 750 high risk sex offenders were reported to be going to be compelled to take routine polygraph tests while they are under the supervision of probation officers (Whitehead, 2013). In parliament the figure was put higher at 980 and the tests were to be an integral part of the

supervision experience for offenders. Under-Secretary of State for Justice, Jeremy Wright explained:

As part of the supervision of sex offenders, it is not the detection of deception that is the critical factor. It is the information disclosed by the offender before, during or after the polygraph test, which is used to inform decisions about their supervision. In other words, it is less about detecting lies and more about gathering useful information to properly manage risk. (Hansard HC Debates, 2013)

The cost of rolling out these new arrangements was said to be in the order of £3 million (Hansard HC Debates, 2013) with much of the cost going on training and equipment:

The polygraph training is being delivered by *Behavioural Measures*, led by Don Grubin, Professor of Forensic Psychiatry at Newcastle University. Probation officers from the new National Probation Service (NPS) are undertaking the rigorous 12 week training programme, including intensive learning and regular assessments, to qualify as Polygraph Examiners. (Ministry of Justice, 2014).

Compulsory lie detector testing started from October 2014 (Bowcott 2014a).

The police officer's use of the polygraph

Hertfordshire Police were the first British police force to enter the field of polygraph testing. As there was no supporting legislation they could not compel suspects to submit to the test and could only use it with the consent of the suspect or detainee. Detective Chief Inspector Glen Channer, head of Hertfordshire's Child Protection Unit, said the polygraph was an 'added weapon in our armoury of investigative techniques' (quoted in Batty, 2011; see also Hamilton, 2011).

South Yorkshire police followed suit in 2013 when their Police and Crime Commissioner Shaun Wright announced the introduction of polygraphs stating that:

This is an excellent opportunity for officers to be proactive in their management of suspects on police bail and contribute to protecting and safeguarding more children at risk of sexual abuse. (BBC News, 2013)

The South Yorkshire Police were originally committed to sending their officers to the USA for 10 weeks of training:

All Polygraph testers must gain accreditation from the American Polygraph Association (APA). The training includes a comprehensive 400 hour, ten-week basic polygraph training course in Texas, followed by a 40 hour post-conviction sex offender testing course and finally a 40 hour quality assurance programme. (South Yorkshire Police and Crime Commissioner, 2013)

The cost of sending officers to Texas for this training was estimated at £35,000 (BBC News, 2013), but later Hertfordshire Police said that South Yorkshire officers were actually joining the training being offered in Hertfordshire:

The 11-week course, which started earlier in the month, is the first of its kind for British policing and will be led by Professor Don Grubin, a leading polygraph expert. It will attach to an intensive Quality Assurance Programme to ensure its effective application and integrity... [It] has attracted considerable interest from other forces including South Yorkshire who have sent two officers on the course. (Hertfordshire Police, 2014)

There also appears to be slight confusion about why the police are actually using polygraphs at all. Hertfordshire see it as an extra part of supervising offenders on the sex offender register:

Polygraph testing will also now be used alongside existing measures to assess the risk posed by Registered Sex Offenders living in our communities where appropriate (Hertfordshire Police, 2014).

Whereas in South Yorkshire the Police and Crime Commissioner saw it as being part of investigations and managing people on police bail:

The [polygraph] programme will reduce investigation costs and...is an excellent opportunity for officers to be proactive in their management of suspects on police bail (Yorkshire Post, 2013)

Another report suggested they would be used following an arrest:

South Yorkshire Police will offer the tests to anyone arrested on suspicion of possessing indecent images of children. (South Yorkshire Times, 2014)

A Detective Inspector, Delphine Waring for South Yorkshire, on the other hand, confirmed that they would be using the polygraph as an additional 'risk-assessment tool' in managing registered sex offenders (South Yorkshire Times, 2014). At present these are the only two forces who have publicly declared that they are using the technique on this voluntary basis.

The effectiveness of the polygraph

There is a wealth of literature and research on the polygraph from its inception, yet results still remains inconclusive. Validity of polygraph outputs are sketchy, there is no theoretical evidence base for Control Question Tests and poor empirical evidence of the polygraphs' effectiveness (for an overview see Ben-Shakhar, 2008). Nearly 50 years ago the American academic Alan Westin declared:

The reliability figures cited by polygraph operators have been rejected in most scientific and legal journals...efforts to have different polygraph operators test the same

subject to judge the reproducibility and independent validity of the polygraph have not been successful...[and] a series of tests by the same operator with the same subject will show very significant changes in the results. (Westin, 1967: 213)

Today a study by the American National Research Council is often taken as a bench mark for the reliability of the polygraph. Its 2003 report stated that polygraph accuracy stood at about 80–90 per cent but the same report also stated that:

Almost a century of research in scientific psychology and physiology provides little basis for the expectation that a polygraph test could have extremely high accuracy

and that:

the inherent ambiguity of the physiological measures used in the polygraph suggest that further investments in improving polygraph technique and interpretation will bring only modest improvements in accuracy. (National Research Council, 2003: 212–213)

The British Psychological Society have been equally sceptical:

Although psychological equipment does accurately measure a number of physiological activities, these activities do not reflect a single underlying process. Furthermore, these activities are not necessarily in concord, either within or across individuals (British Psychological Society, 2004: 29)

The 'stress response' which is measured, for example, may not be a response to 'deception' but could be 'triggered by a host of factors, such as surprise, cognitive load, loud noise, as well as fear of being classified as "deceptive" by a polygraph examiner'. (Ben-Shakhar, 2008:192)

The polygraph test is also said to be easily 'beaten'. Techniques have been long known:

If you bite the inside of your mouth or tongue on a question of no importance, unbeknown to the operator, he will begin to wonder — what's the matter with his machine. (Watson, 1941 cited in Ball, 2006).

Vaughan Bell described the case of Floyd 'Buzz' Fay in the USA, who was wrongly convicted of murder on the basis of polygraph testing:

Determined to show the test was fallible, [Fay] developed a training exercise to help people fool the lie detector and after just 15 minutes of instruction, 23 out of 27 inmates beat the polygraph. Buzz was eventually exonerated, helped by the testimony of the real killer's mother, and his case has become one of the most notorious episodes in the history of the technology. (Bell, 2012)

Ethical, professional and other issues

Polygraphs bring other implications for the criminal justice process concerning ethical and professional issues. The role of the polygraph operator is pivotal and this in turn is based on their training and ethical approach to the work. Whilst the UK has statutory rules on using the equipment a further Code of Practice or guidance is still awaited.

The voluntary polygraph testing to be introduced by the British police will provide an interesting case study. What happens, for example, if the person concerned declines the test? At present that question is met by the usual clichés about 'people who are innocent having nothing to fear' so therefore people who decline 'must have something to hide'. As Grubin has said 'failure to co-operate with any aspect of supervision is a well described potential indicator of risk' (Grubin, 2008: 186); but it could be argued that 'failure to cooperate' when a system is voluntary is not a 'failure' at all, just a choice that has been made.

Professor Grubin has made similar statements about the mandatory use of polygraphs by probation officers:

It's important to emphasise that nobody will be recalled because they failed a test... polygraph testing both facilitates the disclosure of information and alerts offender managers to possible deception, allowing them to work with offenders in a more focused way. (Sky News, 2014; emphasis added)

We might ask what constitutes working 'in a more focused way' and why has the probation work up until now been only 'unfocused'?

The question arises of just how voluntary the police tests will be and how the police officer approaches the person concerned. Will it be offered as a genuine 'free choice' or will there be implicit forms of duress built in? When you know that withholding consent means 'extra attention' is going to be paid to you, this implies the consent is not a free consent, but effectively made under a form of duress. It has been suggested, for example, that people applying to come off the sex offender register might be subject to a voluntary police polygraph test. Registered sex offenders have been able to make such applications to the police since September 2012 if certain criteria are met (Home Office, 2012) but if the police request a polygraph test as part of their 'determination' of the application, will declining it mean that application automatically founders? This is hardly a free consent.

Richard Nixon, President of the USA, when considering polygraph tests for White House staff in 1971 famously declared:

I don't know anything about polygraphs, and I don't know how accurate they are, but I know they'll scare the hell out of people. (quoted in Alder, 2007: 221)

The police may also play on the fact that people confronted with the actual presence of the polygraph may be intimidated by it. This has already been noted in research when people start disclosing things to the operator before the machine is switched on.¹

Intimidation by the polygraph is not helped when operators are encouraged to impress upon the examinee that the machine is virtually infallible so it is pointless trying to resist it. This would also, of course, be a deception played on the person because, as we know, the polygraph is far from infallible. Other operators have used deception during preliminary polygraph tests before the real test. Examinees have been asked to read out numbers on cards selected from a deck and to specifically deny one of the numbers. The operator uses this exercise to show how easily the examinee is revealed by the polygraph. What the examinee does not know is that some operators have used marked cards to ensure they have got it right (both examples in Wilcox, 2013).

Other examples of deception have been noted. Grubin describes a UK study involving two voluntary groups of offenders on probation. One group ('polygraph aware group') were told they would be polygraphed in three months' time to assess whether this advance knowledge would help them avoid risky behaviour. The other group were told they would not be polygraphed but were to be a comparison group ('polygraph unaware group'). At the end of the three months both groups were polygraphed to see if the polygraph had acted as a deterrent for the group who knew the test was coming to them (Grubin, 2003; Grubin et al., 2004). Seventy eight per cent of participants failed the first polygraph test, and both groups were told they would receive a further polygraph test in six months' time, with previous group allocation discarded. Seventy one per cent passed the second test; however, less than half of the original sample took the second test, indicating serious limitations in interpreting the 71 per cent pass rate with any confidence.

Another concern regarding the mandatory roll-out of the polygraph will be its place alongside other assessment tools used in professional practice. Practitioners are known to become reliant on structured assessment tools to inform programmes of intervention (see for example, Baker, 2008; Marshall, 2012). At the same time they are working in a context of high accountability, and the assessment tool invariably becomes the key source of that accountability (see for example, Eadie and Canton, 2002; Marshall, 2012). Could the polygraph provide further accountability issues? Will management and/or inspectors hold the polygraph examiner or practitioner to account for what was recorded by the polygraph?

The emphasis on professional judgment and lack of standardization is concerning. Effectively polygraph tests could be implemented very differently from case to case, and from practitioner to practitioner (Ben-Shakar, 2008). In the polygraph evaluation report, on behalf of the Ministry of Justice, Gannon et al. (2014: 196) further point out that 'the success of polygraph implementation rests largely on the skills and vigilance of supervision professionals who must take appropriate action on the basis of information brought about by polygraphy' and that 'the quality of information provided by probation officers varied across individuals with some probation officers having to be repeatedly prompted regarding the definition of a CRD [Clinically Relevant Disclosure]'. Whilst Gannon et al.'s evaluation 'suggest that polygraphed sexual offenders in the community make more disclosures that are helpful in their management and supervision', the authors also highlight the need 'to remain cautiously optimistic' in the interpretation of these findings.

Grubin (2008) sets out the two aims of polygraph testing as: i) to enhance treatment and ii) to improve supervision, rather than just an approach of 'pass' or 'fail'. This may be acceptable in principle, but with regard to criminal justice it raises further questions:

- If further offences are disclosed by the test (and Grubin provides case examples which suggest they are), will the offender receive further convictions and/or sanctions?
- Is it in the public's interest to disclose the additional offences?(and subsequently increased sanctions?)
- If new offences are disclosed, what mechanisms are in place for the victims and/or the victims' families? Should they be consulted?
- Could the polygraph become a means of conviction rather than informing treatment and supervision, if more victims come forward in the knowledge that a polygraph test will be conducted with an alleged offender?
- Has relevant research on the use of the polygraph in the clinical setting, with specific reference to its use with sex offenders, received sufficient research attention?
- Is more research needed on other possible methods to detect deception, honesty and integrity?
- Does use of the polygraph in attempts to detect deception raise issues concerning human rights and professional codes of conduct?
- Will over-confidence in the ability of any procedure designed to detect deception have serious consequences, especially if the deceivers are few among many non-deceivers?

Research evidence does not suggest a significant reduction in the future offending of sex offenders who have undertaken the polygraph test as part of their management and supervision. There remain many issues with research design and methodologies used to evaluate the use of the polygraph with sex offenders.

Conclusions

It is interesting to speculate on why the polygraph is being introduced into England and Wales now. Cynics might point to the General Election in May 2015 and see it as just a pre-election gimmick by politicians wanting to promote a 'tough on crime' image. As such it stands alongside the recently announced requirement on Young Offender Institutes to turn out all lights by 10.30 p.m. (Bowcott, 2014b) and the tightening of Open Prison rules following recent episodes of prisoners going missing (BBC News, 2014b).

Even if we are being unfair on the government's motives, questions still remain about the effectiveness and the ethics of polygraphs including such basic questions as the right to privacy and the right of the state to deliberately induce states of anxiety in its citizens, in order for the polygraph to pick up on that state of anxiety.

The polygraph gives a veneer of science and medical aura which research suggests it does not deserve.

We might also question why it is only being used on serious sex offenders who are some of the most disliked of offenders. Using the sex offender as *homo sacer* – life without form and value, stripped of political and legal rights accorded to the normal citizen (Spencer, 2009) — might be just the start of a slippery slope that will lead to a more widespread use once the polygraph has been embedded in the public's consciousness.

Grubin states that he has already been in discussions with employers who think polygraphs could be useful in the pre-employment screening of those who want to work with children (cited in Bowcott 2014a); presumably this includes people being polygraphed who have no relevant convictions because they would not be short-listed had they declared such convictions as required - and if they had not declared them then a DBS conviction record check would reveal them. Lie detectors used because we *can* rather than because we *need* them – is this a solution in search of a problem?

Note

1. This fear of the polygraph is similar to the fear that offenders had in the early 1990s when computers were first introduced to the UK police:

The detective in this case explained that the suspect thought [the computer] made more of a difference to a detective's ability than was really the case, believing that he knew more about the suspect and criminal activities. (Ackroyd et al., 1992: 136)

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