

RESEARCH ARTICLE

Falling behind the PACE: lie detectors, policing and lack of foreseeability – an FOI-based study

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Abstract

Despite its contested scientific validity, polygraph interviewing is now an established yet opaque practice within criminal justice in England and Wales, with statute law covering polygraph use in the context of probation for released offenders. In this paper, we highlight non-statutory uses of the polygraph by police forces in England and Wales by presenting analysis of responses to freedom of information (FOI) requests. The boundaries around police polygraph use are undefined and potentially elastic. The policies disclosed state that polygraph interviewing is conducted with regard to the Police and Criminal Evidence Act 1984 (PACE) and the Human Rights Act 1998; yet it is denied that a polygraph examination is a criminal interview conducted under PACE. Furthermore, there is a significant risk that the common law may not satisfy the quality of law requirement insofar as it is insufficiently clear who will be subject to polygraph testing, why and in what circumstances. Therefore, we argue that the legal basis for the police's use of the polygraph is inadequate and imprecise. Without openness and scrutiny regarding the extent of this use, it is difficult to see how the key human rights principle of foreseeability can protect citizens from the risk of arbitrariness.

Keywords: human rights; criminal law; technology; polygraph; police; foreseeability

Introduction

The polygraph – or ‘lie detector’ as it is often known¹ – is not fictional, as some might believe, nor is its use limited to reality TV shows or national security bodies in Russia or the US. Polygraph ‘testing’ is a recently established, yet opaque, practice in criminal justice in the United Kingdom (specifically, for the purposes of this paper, England and Wales), and its remit is continuously but covertly expanding. Previously limited in statute to certain sex offenders released on licence,² polygraph testing can now also be imposed on released domestic violence³ and terrorism offenders,⁴ those subject to terrorism prevention and investigatory measures (TPIMs),⁵ as well as those subject to sexual harm prevention

[†]Thank you to Melanie McLaughlan for her research assistance.

¹For example, in responses to the authors' FOI requests, Kent Police in an Information Sheet calls the polygraph a ‘lie detector’. It is, they state, ‘a device which measures reactions that the human body gives when we tell a lie’.

²OMA 2007, ss 28–30.

³Domestic Abuse Act 2021, s 76.

⁴Counter-Terrorism and Sentencing Act 2021, s 32.

⁵*Ibid.*, s 38. Since 29 November 2022 a criminal court can impose a positive requirement on a defendant under an SHPO. See Police, Crime, Sentencing and Courts Act 2022, s 175, which amended the Sentencing Act 2020, s 343.

orders (SHPOs) via a recent statutory power to impose positive requirements.⁶ It is possible that the above-mentioned statutory measures are the only ones in English law that embed the training, qualification and operational requirements of an industry association from outside the UK (the American Polygraph Association (APA), which represents the polygraph industry in the US) into the justice system in England and Wales.⁷

Until recently, the creeping expansion of the polygraph into criminal justice contexts in England and Wales has attracted little attention or concern from the wider public, Parliamentarians, the media or even from civil society groups, although a recent survey found that only 29% of respondents were comfortable with police use of biometric data to determine if someone was telling the truth.⁸ We might speculate that the deployment of polygraph interviews in the context of sex, domestic abuse or terrorism offenders, is taking advantage of the weakened interest on behalf of the public as regards morally reprehensible, indeed serious crimes, or that the use immunity enshrined in section 30(1) of the Offender Management Act 2007 (OMA 2007)⁹ would successfully mitigate any concerns.

(a) Focus on non-statutory use

This paper is concerned with uses of the polygraph by the police in England and Wales falling outside the above statutory regime. It might be assumed that statute law would restrict the mandate for the use of the polygraph by police forces within strictly circumscribed boundaries, particularly bearing in mind the National Policing Position Statement (2014), which strongly discouraged the use of the polygraph interview in investigations and security screening processes. This statement explained that ‘its use as a method of detecting deceit is at best a controversial one among psychologists’, thus raising ‘adverse consequences for the investigative interview, the wider investigation and the trial process’.¹⁰ The position statement cited the British Psychological Society and the latter’s clear warning:

Anybody who attempts to persuade others (eg a polygraph examiner testing a police suspect) that polygraphic lie detection is an error-free procedure (by, for example, using a ‘stimulation procedure’ – Bull, 1988; National Research Council, 2003) will be attempting to deceive¹¹

This is unsurprising, in view of the fact that even one of the main figures in the history of the polygraph, Leonarde Keeler, famously said that there was no such thing as a ‘lie detector’.¹²

However, despite these warnings, our findings, based on FOI requests to police forces and government departments discussed further below, reveal opaque uses of the polygraph by the police that are not regulated by statutory provisions or other mechanisms. These include, as far as the data shows, the use of polygraph interviewing in connection with:

- suspects for child-protection decisions;
- community sentences;
- cautions, with polygraph testing being one of the conditions;
- risk-assessment for deletion from the sex-offender register;

⁶Police, Crime, Sentencing and Courts Act 2022, s 146; *R v Owen Huw David* [2023] EWCA Crim 1561.

⁷The Polygraph Rules 2009, SI 2009/619; The Polygraph (Amendment) Rules 2022, SI 2022/191.

⁸S Stockwell et al ‘The future of biometric technology for policing and law enforcement: informing UK regulation’ CETA S Research Reports (March 2024) p 45.

⁹Polygraph testing only supports a post-conviction risk assessment function pursuant to statutory provisions.

¹⁰National Policing Position Statement: The Use of Polygraph in Investigations’ (Association of Chief Police Officers, May 2014), available at <https://library.college.police.uk/docs/APPREF/National-Policing-Position-Statement-use-of-Polygraph-May-2014.pdf>.

¹¹British Psychological Society *A Review of the Current Scientific Status and Fields of Application of Polygraphic Deception Detection* (2004).

¹²L Keeler ‘Debunking the lie detector’ (1934) 25 *American Institute of Criminal Law & Criminology* 153.

In addition, there are restrictions around access to legal representation by those being tested.

(b) Foreseeability as framework of analysis

In this paper, we use an innovative approach combining doctrinal, law-in-context and empirical research elements, including analysis of European Court of Human Rights (ECtHR) case law and the Court of Appeal decision in *David*,¹³ to argue that the legal basis for such polygraph interviews is inadequate and imprecise; that satisfying the test for necessity and proportionality would (or should) be a high(er) burden; and that lessons have not been learned from *Bridges*¹⁴ or the cases that came before. We shall argue that the purposes for which police forces deploy the polygraph lack clear delineation and are unconstrained by independent oversight or statutory protections – including those in PACE, a key legislative framework intended to regulate police powers and protect individual rights. Our research suggests that without mandatory transparency and candour regarding the extent of the use of the polygraph by the police, it is difficult to see how a key principle underpinning human rights – foreseeability – can protect citizens from the risk of abuse. It has been argued that, since the *Bridges* case, the police have been afforded too much discretion to extend the remit of biometric surveillance.¹⁵ In this paper, we show that – in a similar way – police forces are pushing their own boundaries regarding the deployment of the polygraph, at the same time deflating or ignoring the thresholds for legality, necessity and proportionality.

We have grounded our analysis in foreseeability and proportionality as underpinning principles of the human rights framework. Foreseeability is a fundamental part of the principle of legality, designed to minimise arbitrary and abusive application of the law by the state with the requirement for appropriate safeguards, and therefore uphold justice and fairness. The proportionality principle is at the core of the assessment of the reasonableness of a measure that restricts individual rights, which the polygraph significantly does. Analysis of proportionality implications is therefore vital, alongside a foreseeability assessment.

(c) Author stance

This paper focuses upon the non-statutory uses of the polygraph by the police and legal issues arising from this. The considerable uncertainty around the scientific validity of polygraph interviewing contributes directly to these legal issues, as we explain below. We recognise that some within the criminal justice community have found polygraph interviewing to have utility and value for risk management and facilitating disclosures. While this paper acknowledges and discusses this point of view, it should be noted that the authors do not find these views unproblematic.

(d) Structure of the paper

The remainder of the paper is structured as follows. [Section 1](#) summarises the scientific position regarding the polygraph machine. [Section 2](#) then reviews the legal basis for police use of the polygraph and analyses the extent of such use in England and Wales, and the applicable policies, as revealed by responses to our FOI requests. [Section 3](#) discusses the implications of the remit of PACE, the issue of the voluntariness of the polygraph examination, and the availability or otherwise of legal representation, with [Section 4](#) suggesting significant implications for the key principles of foreseeability, necessity and proportionality. In [Section 5](#), we conclude that further attention must be paid to transparency and candour, and urge that it is time to abandon reliance upon the common law in respect of police use of

¹³R v Owen Huw David [2023] EWCA Crim 1561.

¹⁴R (*Bridges*) v Chief Constable of the South Wales Police [2019] EWHC 2341 (Admin).

¹⁵J Purshouse and L Campbell 'Automated facial recognition and policing: a Bridge too far?' (2022) 42 *Legal Studies* 209.

contentious technologies and instead consideration be given to the introduction of a new ‘police law for technology use’.

1. The science behind the polygraph

Managing to separate true from false statements has been a dream of humankind since ancient times. The aspiration to detect lies in a reliable (ie scientific) way, has shaped mythology, literature, and science fiction; from Wonder Woman’s lasso of truth to Mary Poppin’s lie-detecting thermometer to the modern polygraph and ‘emotion’ AI, people instinctively strive towards developing a method of looking into the souls of others.¹⁶

Crucial for the understanding of the polygraph is the premise that ‘deception and truthfulness reliably elicit different psychological states across examinees’¹⁷ and in particular the belief that the polygraph is a device that measures certain ‘physiological responses ... which are interpreted to determine whether an individual has responded to questions in a truthful or deceptive manner’.¹⁸ However, the science is disputed; there is little to no mainstream scientific acceptance of correlation between physiological responses and the detection of lies. Ever since the first deployment of the polygraph in criminal courts,¹⁹ scientific institutions,²⁰ and military organisations²¹ have continuously and almost unanimously discredited the polygraph as regards its validity in fact-finding processes. What is more, the very scientific paradigm in psychology which propelled the polygraph into existence has receded due to its lack of methodology, indefensible empirical basis and thus deficient validity.²² As the Royal Society notes summarily:

The polygraph is a well-known approach to detecting deception ... it relies on the measurement of skin conductance, which can be influenced by arousal during deception – it has been repeatedly evaluated and its validity and reliability have been challenged for decades in systematic reviews and evaluations. In addition to questions about its reliability and validity, the polygraph is particularly vulnerable to countermeasures – covert or overt measures taken by the subject of the polygraph in order to distort or undermine any conclusions.²³

¹⁶See for instance KN Kotsoglou and M Oswald ‘Not “very English” – on the use of the polygraph by the penal system in England and Wales’ (2021) 85 *The Journal of Criminal Law* 189; M Oswald ‘Technologies in the twilight zone: early lie detectors, machine learning and reformist legal realism’ (2020) 34(2) *International Review of Law, Computers & Technology* 214.

¹⁷*The Polygraph and Lie Detection* (Washington, DC: National Research Council, 2003) p 65.

¹⁸See eg ‘Polygraph Examinations – Instructions for Imposing Licence Conditions for Polygraph on People Convicted of Sexual Offences (PCoSOS), Terrorist and Terrorist Connected Offences Policy Framework, Ministry of Justice, 24 May 2024, para 1.1.’ (National Offender Management Service, 2015) para 1.4. See also J Synnott et al ‘A review of the polygraph: history, methodology and current status’ (2015) 1 *Crime Psychology Review* 59.

¹⁹See *Frye v United States*, 293 F 1013 (DC Cir 1923).

²⁰See eg *The Polygraph and Lie Detection*, above n 17; see also *Scientific Validity of Polygraph Testing: A Research Review and Evaluation* (Washington, DC: Office of Technology Assessment, November 1983). The Royal Commission on Criminal Procedure had considered the introduction of the polygraph test into England and Wales. Its 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 (Philips Commission), Cmnd 8092 (London: HMSO, 1981) para. 4.76. A report from the British Psychological Society, ‘Report of the Working Group on the Use of the Polygraph in Criminal Investigation and Personnel Screening’ (1986) 39 *Bulletin of the British Psychological Society* 81, also argued that the polygraph was unscientific. See also *A Review of the Current Scientific Status and Fields of Application of Polygraphic Deception Detection* (London: British Psychological Society, 2004). For a useful overview of the history and critiques of the polygraph, see K Luther et al ‘Do automated and virtual interrogation and deception detection systems work?’ in E Pico et al (eds) *The Impact of Technology on the Criminal Justice System* (New York: Routledge, 2024).

²¹A report, prepared for the US Department of Defence by the Institute for Defense Analysis, was submitted on 31 July 1962; it was immediately classified as it undermined the reliability of lie-detector tests. Cited by K Alder *The Lie Detectors* (New York: Free Press, 2007) p 54.

²²KN Kotsoglou ‘Zombie forensics: the use of the polygraph and the integrity of the criminal justice system in England and Wales’ (2021) 25 *The International Journal of Evidence & Proof* 16.

²³‘Neuroscience, society and policy’ (The Royal Society, 2011) Report 01/11 DES2015.

In other words, there is simply no unique physiological indicator that reflects a single underlying psychological process, let alone deception.²⁴ The realisation that there is no known physiological response which would be unique to deception, or indeed to any other cognitive state, pushes a sharp needle into the theory underpinning the polygraph.²⁵ What is more, even seasoned polygraph operators admit that the polygraph ‘test’ is primarily ‘a psychological procedure and only secondarily of a physiological nature’.²⁶ The emphasis on utility over validity is also reflected in the findings of the US National Research Council, when it states that one of the roles of the polygraph test ‘is to influence the conduct of a polygraph interview’. A polygraph interviewer, it observes:

who detects what he or she believes to be deceptive responses during the polygraph test normally conducts the remainder of the interview differently than an examiner who sees no signs of deception. Such an examiner may ask more probing questions, do additional charting, shift to a different type of polygraph test protocol, or take a more confrontational attitude in the interview in an effort to elicit an admission or to ‘clear’ the examinee of suspicion.²⁷

This means that according to its own terms, the polygraph is not an objective scientific procedure but an interrogation tool.

(a) The utility of the polygraph

Despite this unscientific nature, the use of the polygraph in the criminal justice system in England and Wales is justified by its proponents based on two main arguments. First, the *utility* argument: that even if the polygraph does not ‘work’ as a lie detector, its use is justified because more disclosures (confessions) are obtained from offenders. Secondly, the *containment* argument: that the protections and safeguards applied to criminal evidence are irrelevant to polygraph testing in a risk assessment, probation, investigatory or intelligence context.²⁸

The utilitarian approach to the polygraph is epitomised by the evaluation carried out after the passing of the OMA 2007. This study considered whether there had been more ‘clinically significant disclosures’ in an offender group subject to polygraph testing compared to a comparison group, focusing on numbers of disclosures rather than their truth-conducive character.²⁹ Furthermore, the 2023 review of counter-terrorism polygraph tests was a ‘process evaluation’ only, concluding that polygraph examinations had ‘embedded well into everyday practice’ and were regarded as an ‘effective risk management tool’. However, it was possible to detect some concerns among the positive messages – a finding of significant response where the person on probation was not forthcoming with information about why this might have occurred, and subsequent investigations found no information to corroborate the significant response, ‘sometimes ... made the relationship with the person on probation difficult and impacted risk management’. Some counter-terrorism police and psychologists felt further consideration was needed around ‘proportionate responses, polygraph examination processes, eligibility, and the role of psychologists in the polygraph process’.³⁰

²⁴ *A Review of the Current Scientific Status and Fields of Application of Polygraphic Deception Detection* (British Psychological Society, 2004). See also above n 17.

²⁵ Above n 22.

²⁶ See S Abrams ‘The utilization and effectiveness of the stimulation test’ (1978) 7 *Polygraph* 178 at 178.

²⁷ Above n 17, p 22 (emphasis added).

²⁸ For further discussion of these arguments and others see Kotsoglou and Oswald, above n 16.

²⁹ TA Gannon et al ‘The evaluation of the mandatory polygraph pilot’ (Ministry of Justice Research Series 14/12, July 2012).

³⁰ S Keeton et al ‘The use and operation of counter-terrorism polygraph examinations; process evaluation findings’ (Ministry of Justice Analytical Series, October 2023).

2. The policing polygraph landscape as revealed by FOI requests

(a) *The legal basis for police use of the polygraph*

Police forces in England and Wales operate based upon a tradition of ‘policing by consent’ built on the so-called ‘Peelian principles’. The rationale underpinning those principles is that the authority of the police relies upon the consent of the public and is not determined by an exhaustively codified regime of powers and duties.³¹ Absent applicable statutory powers or restrictions, police powers stem from the common law; in a country ‘where everything is permitted except what is expressly forbidden’, the police can act lawfully, provided that there is nothing to make it illegal.³² The police have common law power to obtain and store information for policing purposes, for the maintenance of public order and the prevention and detection of crime, including the overt taking of photographs.³³ Correspondingly, police constables owe the public a common law duty to prevent and detect crime.³⁴

However, this ‘citizen-in-uniform’, common law approach has constraints and limitations. The ECtHR has consistently held that a given measure relating to interference with rights cannot be regarded as valid law unless it is formulated with sufficient precision to enable citizens to regulate their conduct and to be able to foresee the consequences of a given action or situation.³⁵ Proportionality and the use of procedural guarantees against arbitrariness are essential in that regard.³⁶ Crucially, the requirement for sufficiently clear rules concerns both the circumstances in, and the conditions on which, the respective measure is carried out. If the court finds that there is a considerable risk of arbitrariness, the respective measure or even domestic law will not be compatible with the ‘lawfulness requirement’,³⁷ in view of the higher status of rights guaranteed by the European Convention on Human Rights (ECHR) – *lex superior derogat legi inferiori*.

So how does the legal framework around the use of the polygraph, especially as regards its remit, fare? An answer to this question presupposes a detailed overview of the polygraph landscape, including the scope and purposes of use, and policies detailing who will be subject to testing, how and in what circumstances. In view of the lack of publicly accessible information, further data was gathered through FOI requests.

(b) *Non-statutory use of the polygraph by the police in England and Wales – analysis of FOI responses*

We have taken a fact-finding approach to our analysis of the legal framework surrounding the use of the polygraph, including consideration of the policy and other extra-legal factors that may affect the effectiveness of the law. More specifically, we investigated the extent of non-statutory uses of the polygraph by police forces in England and Wales. FOI requests have been fundamental to this approach. Our FOI requests asked for information relating to the polygraph testing by police forces of:

- individuals suspected of, or charged with, an offence but not yet convicted, or who were under investigation;
- polygraph testing for child protection reasons;
- tests in connection with bail or community sentences; and
- testing for reasons other than for the management of sexual offenders, terrorism offenders, domestic abuse offenders and those subject to TPIMs.

³¹See Home Office ‘Definition of policing by consent’ (December 2012).

³²*Malone v Metropolitan Police Commissioner* [1979] 2 WLR 700, 357 per Megarry V-C.

³³*R (Catt) v Association of Chief Police Officers* [2015] UKSC 9, para 7, per Lord Sumption.

³⁴Above n 14.

³⁵See for instance ECtHR *Liivik v Estonia* Application No 12157/05, 25 June 2009 and ECtHR *Vyerentsov v Ukrain*, Application No 20372/11, 11 April 2013.

³⁶ECtHR *Bărbulescu v Romania* [GC] Application No 61496/08, 5 September 2017, paras 119–122.

³⁷ECtHR *Cangi v Turkey* Application No 24973/15, 8 April 2024, para 42.

(c) Comments on the FOI request method

Deploying FOI requests comes with challenges: drafting effective requests that will not be misunderstood or rejected; the likelihood that information will be withheld due to the availability of exemptions; and the challenge of comparing differing formats, styles of response and documentation. However, as researchers who in this context are ‘outside outsiders’,³⁸ the advantages outweigh the challenges. Our ‘round-robin’ FOI requests not only enabled us to obtain information about the extent of polygraph use which was not well known or publicly available; the responses also allowed us to identify inconsistencies in policy and practice between police forces, particularly valuable for research concerned with the consistent and fair use of state power and activities that raise rule of law concerns. As Savage and Hyde explain:

Freedom of information requests can be dispatched to multiple ... authorities at the same time, allowing information held by public authorities to be obtained cheaply and in a uniform fashion. This data can then be usefully compared, allowing trends to be discerned.³⁹

In total, 91% of the police forces which were contacted (43) responded; 95% of respondent police forces included a statement neither confirming nor denying (NCND) whether any additional information relevant to the FOI request was held, by virtue of FOIA 2000, sections 23, 24, 30 and 31.⁴⁰ Interestingly, it was confirmed that this statement had been drafted centrally by the National Police Chiefs’ Council data protection and FOI central referral unit, and was justified by concern over revealing the intelligence or operational picture, or gaps in capability. What is more, the NCND statement was used inconsistently by police forces. For example, some forces applied it only to questions 1–2 of our FOI request (see [Figure 1](#) below), another applied a partial NCND to a combination of questions, and another applied a full NCND. Some forces stated that no information was held regarding the use of polygraphs in respect of sex offenders and domestic abuse offenders. This inconsistency, combined with the differing responses mentioned above to investigatory uses, might allow certain inferences to be made, although we do not attempt to do so in this paper. It is certainly the case, however, that the application of NCND to the responses adds weight to the concerns about the opacity of police polygraph use, as discussed further in [section 5\(a\)](#) below.

Four forces failed to respond, including, significantly, Greater Manchester Police (although a late response revealing a number of tests, but no policies, has now been received⁴¹). Of those responding, 15% (ie seven forces) disclosed carrying out polygraph tests in circumstances mentioned above, and 21% (nine forces) disclosed policies, forms or other documentation related to such testing. Notably, a few

³⁸R Reiner and T Newburn ‘Police Research’ in R King and E Wincup (eds) *Doing Research on Crime and Justice* (Oxford: Oxford University Press, 2nd edn, 2008) pp 355–357, with thanks to Angela Paul for drawing our attention to this chapter.

³⁹A Savage and R Hyde, ‘Local authority handling of freedom of information requests: lessons from a research project’ (2013) 19(2) *European Journal of Current Legal Issues*.

⁴⁰This is illustrated by the following extract: ‘To confirm or deny that any other information is held in relation to Polygraph testing in circumstances or scenarios beyond sex offender, or DA [domestic abuse] offender management at force level, would reveal whether the technique has utility beyond post-conviction sex offender, or DA offender testing within the wider Law Enforcement sphere. Notably, to confirm or deny whether any other information is held relevant to Polygraph testing in a Counter Terrorism setting, whether that is a post-conviction terrorist offender, or someone suspected of being so connected with such activities, would reveal whether such techniques are in use as an investigative, and more so, intelligence gathering tactic.’

⁴¹Since carrying out the analysis, and following an FOI enforcement notice issued to Greater Manchester Police by the Information Commissioner’s Office on 20 December 2023, a response to our request was received from GMP on 18 March 2024 (a delay of 9 months). The response stated that over the last 6 years: 20 suspects were invited, requested or required to take a polygraph test; 14 suspects had taken a test for the purposes of assessing their risk posed to children; 1 had been tested in connection with bail/community sentence and £16,726.51 was spent on polygraph equipment. No policies or documentation were disclosed, the force stating ‘GMP do not hold a relevant policy in relation to individuals charged with an offence but not yet convicted’.

forces denied using polygraphs at all. For example, Gwent Police stated that: ‘Polygraph is a specific form of integrity testing which we do not employ’.

(d) Purposes of polygraph interviews

Information about polygraph interviews carried out within the last six years was disclosed by seven forces. The aggregate number of such interviews for the purposes specified in our questions was as follows:

	FOI question	Data (across seven Forces)
1. May relate to criminal investigation or to associated risk assessment	The number of occasions on which an individual suspected of, or charged with, an offence but not yet convicted, or who is being investigated by your Force, has been invited, requested or required to take a polygraph test.	164
2. Actual number of polygraph interviews	In respect of the above, the number of occasions that an individual suspected of an offence, charged with an offence but not yet convicted, or who is being investigated by your Force has in fact taken a polygraph test.	149
3. Risk assessment / Children	The number of occasions that an individual suspected of an offence, charged with an offence but not yet convicted, or who is being investigated by your Force has been invited, requested or required by the force to take a polygraph test for the purposes of assessing the risk those individuals are posing to children.	228
4. Bail/community sentence	The number of occasions that an individual has been requested or required to take a polygraph test as part of a bail condition or in connection with a community sentence/order.	4
5. Any other case	The number of occasions that polygraph testing has been requested or required for any individuals/circumstances other than for the management of sexual offenders, terrorism offenders, domestic abuse offenders and those subject to TPIMs.	20

Figure 1: Summary of FOI responses.

Furthermore, documentation disclosed pursuant to our FOI requests included (in no particular order): a polygraph pre-conviction guidance document (Suffolk); different versions of a voluntary polygraph testing information sheet/information sheet for risk management and assessment of post-conviction sexual offenders (Kent, Bedfordshire); a 'voluntary testing consent' form (South Yorkshire); a conditional cautions information sheet (West Yorkshire, Essex); a consent form in respect of conditional cautions (Suffolk); Standard Operating Procedure (SOP) Title: Polygraph for Post-Convicted Sex Offender Management (version 1, March 2022) – Redacted (Hertfordshire and Bedfordshire); National Polygraph Policy v12 ongoing, updated 14.03.23 (working Polygraph Operational Procedures) – Redacted (Essex); Polygraph Examinations Procedure – Northumbria Police October 2021; National Offender Management Service – Mandatory Polygraph Testing; Information for Offenders (Ministry of Justice); Ministry of Justice Polygraph Examination Framework;⁴² ACPO May 2014 National Policing Position Statement: the Use of the Polygraph in Investigations (as above); a link to software manuals provided by the US-based commercial provider (which we understand is the sole provider) of the polygraph software algorithm and hardware (Lafayette Instrument)⁴³ (Ministry of Justice, North Yorkshire, Cumbria); a link to the 'Utah Numerical Scoring System' (via an article from 1999, Home Office, Ministry of Justice).⁴⁴

The above documentation and the FOI responses indicate that (in addition to testing pursuant to an SHPO) police forces may or could deploy polygraph testing for the following purposes:⁴⁵

- 'voluntary' risk assessment of post-conviction sex offenders (all offenders subject to part 2 of the Sexual Offences Act 2003) but not the statutory assessment of licence conditions conducted by the Probation Service (SOP 2022);
- assessment of offenders who apply for removal from the sex offenders' register (SOP 2022);
- assessment of offenders within six months of such removal (SOP 2022),
- assessment of 'any other offender for whom the offender manager deems that polygraph examination may assist in the effective risk management of that offender' (SOP 2022);
- in connection with review of indefinite notification requirements 'as a means of demonstrating their attitude to offending and reassuring the police that their risk has now been minimised' and in relation to other registered sex offender discharge applications to 'display that their risk is now minimised' (Northumbria Examinations Procedure);
- the issuing of conditional cautions with a 'requirement' to take part in a polygraph examination as a means of disposal for the offence of failing to comply with sex offender registration requirements, breach of SHPO, 'or other offences if the criteria are met', where non-cooperation is deemed to be a failure to engage and could result in prosecution for the original breach (SOP 2022, Suffolk Constabulary consent form);
- risk management of those suspected of committing sexual and 'violent offences' (Northumbria Examinations Procedure);
- testing of 'those who have been arrested on suspicion of IIOC [indecent images of children] offences' (Suffolk);
- 'enhanced risk assessment of post-conviction sexual offenders, enabling appropriate offender management and safeguarding of potential victims of sexual offending through use of polygraph' (Bedfordshire Police);
- testing of 'suspects of online child sexual abuse offences' (2023 Operational Procedures);

⁴²Ministry of Justice 'Polygraph examination policy framework' (25 June 2021), available at <https://www.gov.uk/government/publications/polygraph-examination-licence-condition-policy-framework>.

⁴³See <https://lafayettepolygraph.com/downloads/manuals>.

⁴⁴The relevance of this is unclear as Behavioural Measures (the polygraph training provider) confirmed that they use the 'Empirical Scoring System (ESS)'.

⁴⁵The source of the information is mentioned in parenthesis.

- in connection with child contact, ‘A truthful test may be used to support decisions regarding child contact’ (Kent);
- in connection with bail decisions/community sentences or orders (disclosed by Essex);
- in relation to ‘domestic abuse’ (2023 Operational Procedures);
- in relation to ‘child sex offender disclosure scheme’ (2023 Operational Procedures);
- in connection with Multi-agency Public Protection Arrangements (2023 Operational Procedures);
- in connection with ‘stalking protection orders’ (2023 Operational Procedures);
- in connection with three further uses redacted from the 2023 Operational Procedures.

Many of the above purposes relate to risk management or risk assessment of those convicted or suspected of sexual offences, and the facilitation of admissions or intelligence disclosures. The 2023 Working Polygraph Operational Procedures state that ‘any use outside these agreed parameters should be agreed through the NPWG [National Polygraph Working Group] and in matters of urgency through the Chairperson’. It is therefore possible that other uses, undisclosed or redacted, may exist. One police force expressed an ambition to ‘embed polygraph pre-con [pre-conviction] testing within various other departments where applicable, so [that they] can safeguard as many victims and vulnerable people as possible’.⁴⁶

Furthermore, College of Policing minutes⁴⁷ note that ‘one force recently used polygraph evidence in a statement’, contrary to the above-mentioned ACPO position statement which strongly discourages use of polygraph examinations in investigations.⁴⁸ We should note, finally, that in response to our FOI request, two forces stated that they do not ‘routinely’ use polygraph tests for investigatory purposes (Bedfordshire and Cambridgeshire), while another two forces said that they do not use testing for investigatory purposes for sex and domestic abuse offenders (Devon and Cornwall and Dorset). Yet another disclosed that they do not deploy ‘overt’ testing (Gloucestershire): due to the ‘neither confirm nor deny’ proviso deployed by all forces, it was not possible to ascertain the extent (if any) or nature of ‘covert’ testing.

3. PACE, voluntariness of polygraph examination, and legal representation

(a) *The remit of PACE 1984*

In all three of the procedures disclosed by police forces (as mentioned above), it was admitted that ‘[t]here is currently no UK law governing the use of the polygraph by police for risk assessment and management of sexual offenders’.⁴⁹ Indeed, what legal basis justifies the taking of child contact decisions (which may include contact with the individual’s own children) on the basis of polygraph examination, for instance? It appears that, in a similar way to the purported legal basis for the deployment of live facial recognition, police forces are relying on a patchwork of uncoordinated fragments from different areas of law, notably common law and general statute, to justify the extraction of information via the deployment of a polygraph interrogation tool, and the taking of decisions based on polygraph interview results. This should be contrasted to the clear statutory provisions governing polygraph interviews by the Probation Service in the context of – we cannot stress this enough – a closed number of offences.

Nevertheless, the polygraph operating procedures assert that ‘polygraph examination will be conducted with regard to the provisions of the Police and Criminal Evidence Act (1984) and Codes of

⁴⁶Suffolk Police Polygraph Pre-conviction guidance and process.

⁴⁷College of Policing letter dated 14 June 2023, available at <https://assets.college.police.uk/s3fs-public/2023-08/FOIA-2023-074.pdf>.

⁴⁸As above n 10.

⁴⁹Standard Operating Procedure Title: Polygraph for Post-Convicted Sex Offender Management (version 1, March 2022) – Redacted; National Polygraph Policy v12 ongoing, updated 14.03.23 (working Polygraph Operational Procedures) – Redacted; Polygraph Examinations Procedure – Northumbria Police October 2021.

Practice and the Human Rights Act'.⁵⁰ Worryingly though, PACE does not govern the use of polygraph interviews in any interrogation context: indeed, it contains no mention thereof. In contrast, the UN Manual on Investigative Interviewing for Criminal Investigation, which advises on human-rights compliant interviewing based on the Mendez Principles on Investigative Interviewing and Information Gathering (2021),⁵¹ states that '[t]he use of lie-detection technologies is ineffective and may lead to errors in justice'.⁵² What is more, documentation disclosed suggests an inconsistent approach to the application of PACE. Despite the importance of independent legal representation of suspects and offenders (following conviction), a common and dominant theme in the documentation was the exclusion of such representatives from the polygraph interview – police forces stated that no legal representative or third party is to be permitted to accompany the interviewee. There appeared to be no exception made for vulnerable interviewees. Nor would free legal advice be provided, a decision justified by the assertion that '[a] polygraph examination is not a criminal interview conducted under PACE 1984'⁵³ – which contradictorily, runs counter to the praying-in-aid of PACE as a legal framework for polygraph interviews.

Procedural fairness thus appears to be a significant concern, bearing in mind the semi-evidential and semi-investigatory nature of several of the purposes (see above section 2b) for which polygraph interviews are deployed by the police, including for decisions relating to the sex offenders register, conditional cautions in which polygraph testing is stated to be mandatory, in connection with stalking protection orders and, importantly, the interviewing of suspects for decisions relating to child contact where a parallel offence is being investigated. It could be argued that polygraph interviews are not being used in a conventional 'criminal investigation' or 'evidential' context. However, polygraph interviewing or agreement to such interview in many of the circumstances mentioned above appears to link to a high-stakes decision being taken about an individual facing significant consequences – such as issuing of stalking protection orders, receiving a conditional caution versus prosecution – potentially without the individual having access to independent advice to weigh up available choices. It has not been disclosed whether a police caution as specified by PACE is issued to the interviewee before such deployment of the polygraph.

(b) On voluntariness and legal representation

As mentioned above, the disclosed documentation asserts that the polygraph interview is 'entirely voluntary', and not 'a criminal interview'. Therefore, they add, 'free and independent legal advice is not available'; speaking to a solicitor should be done before the subject attends the polygraph interview and is 'at their own expense'.⁵⁴ This suggests an assumption that 'voluntariness' will supposedly remedy the polygraph interview's extraction from the remit of PACE. Of course, an interview can always be said to be voluntary, to the extent that it would be unthinkable to (physically) force someone to undertake the polygraph test, but the question of 'voluntariness' does not ride on physical coercion. In a case involving the question of false imprisonment and enforced compliance, the Supreme Court held that even though it was physically possible for the claimant in the case to break his curfew, his compliance with the restrictions was enforced and not voluntary, due to threats of force, legal process or further confinement, backed up by the power of the state.⁵⁵

Indeed Code C (detection, treatment and questioning of persons by police officers) of PACE itself recognises that '[t]he rights, entitlements and safeguards that apply to the conduct and recording of

⁵⁰Ibid.

⁵¹See <https://interviewingprinciples.com/>.

⁵²United Nations 'Manual on Investigative Interviewing for Criminal Investigation' Ref DPO 2024.01 I OHCHR 2024 I UNODC 2024, para 4.5.

⁵³See above n 49.

⁵⁴As above n 49.

⁵⁵*R (Jalloh) v SSHD* [2020] UKSC 4.

interviews with suspects are not diminished simply because the interview is arranged on a voluntary basis'.⁵⁶ Relatedly, in the ECtHR cases of *Wang v France*⁵⁷ and *Dubois v France*,⁵⁸ both applicants had consented to being interviewed and had been informed of their right to end the interview at any point, in accordance with the law as applicable at that time. However, they had not been expressly informed of their right to remain silent and had not been offered an opportunity to obtain legal assistance and, in one case, the assistance of an interpreter.⁵⁹ The Court found, with regard to the defence rights protected by Article 6(1) and (3)(c) of the ECHR (right to a fair trial), that the requisite safeguards in the context of a voluntary interview should be the same as those applicable to police custody.

(i) *Both inside and outside of PACE*

It is beyond the scope of this paper to conclude definitively whether each of the purposes for which polygraph examination is deployed by the police in England and Wales falls within the scope of Article 6 of the ECHR. It is not engaged, for instance, where polygraph interviews are imposed pursuant to an SHPO as a 'safeguarding' measure.⁶⁰ However, a polygraph interview is an interrogation tool designed to generate adverse statements. As the National Polygraph Examination Policy (Standard Operating Procedure) states: 'The focus of the polygraph process is not solely on whether the subject shows significant responses on a test, but on facilitating admissions or intelligence disclosures.'⁶¹ In the probation context, such disclosures are claimed to assist in the assessment and supervision of offenders for risk management purposes. The above policing purposes potentially extend beyond risk management, influencing decisions relating to an individual's treatment by the criminal justice system, including determination of an application for removal from the sex offender's register, and whether an individual receives a conditional caution as opposed to facing prosecution.

Further, although polygraph testing relating to decisions over child contact could be categorised as 'safeguarding', there appears to be a close linkage to parallel investigations into potential offences relating to indecent images of children. It must be questionable, therefore, whether polygraph examination relating to child contact can in reality be separated from such parallel investigation. The content of the 2023 procedure suggests that there is certainly a blurred line: the polygraph procedure will be part of 'disclosure' but not part of 'criminal proceedings'; it will be included in the 'MG6D' (police schedule of relevant sensitive material for the prosecutor) but polygraph chart data will be excluded from subject access requests; the information is 'intelligence' only but 'early investigative advice may be sought where disclosures from a polygraph examination form part of the investigative strategy'.⁶²

So, despite the rights-impacting consequences of police polygraph examinations, the polygraph is said at the same time to be within and also outside the scope of PACE and other disclosure, investigatory and intelligence processes and procedures. PACE, however, is a coherent web of safeguards in respect of the powers and duties of the police. Cherry-picking aspects of PACE severely disrupts its procedural architecture and protection.

(ii) *Voluntariness and polygraph as 'lie detector'*

What is more, it is highly questionable whether the interview could be said to be voluntary in any of the circumstances covered by the policies disclosed. As we explored above, the polygraph interview is designed as an interrogation tool. Unlike door-to-door enquiries or voluntary interviews of witnesses,

⁵⁶Code C, para 3.21, available at <https://www.gov.uk/government/publications/pace-code-c-2023>.

⁵⁷ECtHR *Wang v France* Application No 83700/17, 28 April 2022.

⁵⁸ECtHR *Dubois v France* Application No 52833/19, 28 April 2022.

⁵⁹The ECtHR held unanimously that there had been a violation of Art 6(1) and (3) (right to a fair trial/right to legal assistance) of the ECHR in the case of *Wang v France* *ibid*), and by six votes to one, that there had been no violation of Article 6 (1) and (3)(c) in the case of *Dubois v France* *ibid*.

⁶⁰As above n 13, para 20.

⁶¹As disclosed pursuant to our FOI requests, see section 2 above.

⁶²National Polygraph Policy v12 ongoing, updated 14.03.23 (working Polygraph Operational Procedures) – Redacted.

refusal to take a test and admissions made by the individual during that process, can have direct and serious consequences for the interviewee. Bearing in mind the steeply asymmetric imbalance of power between the citizen and the state, it would be a matter of priority to determine the impact on the relationship between the police and the individual of a refusal to volunteer: for instance, how is such refusal recorded and what impact, if any, does this have on the future classification and monitoring of that individual? Neither the responses to our FOI requests nor (as far as we are aware) other publicly available information provide answers to these questions.

What is more, the supposedly voluntary character of the polygraph interview should be viewed in light of real-world contexts. If the subject is ‘found to be truthful’, then, the Kent Police information sheet adds:

- ‘a) [his/her] risk could lower.
- b) If the subject was applying to come off the register after 15yrs, a truthful test may support [his/her] application.
- c) a truthful test may be used to support decisions regarding child contact’.

A positive outcome is utilised as strong incentive for ‘voluntary’ participation. Such an outcome, however, is merely the flipside of a negative one. The suspect must make a decision under pressure. The information sheet further states that the subject will ‘fail’, ‘if the results suggest that [the subject has] not told the truth’, suggesting that the polygraph is being presented to the subject as able to detect lies, thus potentially increasing the pressure for ‘voluntary’ participation. This is not only contrary to scientific consensus but does not cohere with the Ministry of Justice Framework, which advises that:

The term ‘lie detector’ should not be used either verbally with the individual or in any written form. (para 2.6).⁶³

This presentation of the polygraph as ‘lie detector’ is a crucial aspect of the question of voluntariness. Where it is suggested that polygraph testing can determine truthfulness, the portrayal of the interview as ‘voluntary’, in circumstances critical to the individual, is disingenuous at best, and emphasises the importance of the PACE contradictions and exclusion of legal advice discussed above.

(iii) *Oppression concerns*

Furthermore, there are a number of references to section 76(2)(b) of PACE within the documentation disclosed, and discussion of the risk that confessions made as part of the polygraph procedure, if used in evidence, are likely to be challenged on the grounds of oppression or unfairness (importantly, courts in England and Wales accept that the use of deliberate deception on a suspect may contribute to a finding of oppression⁶⁴). Relatedly, it is stated that confessions will be used as intelligence ‘but may lead to further investigation with the purpose of initiating criminal proceedings’ (such as interview under caution or arrest).⁶⁵ It appears, therefore, that the polygraph test may be used as an interrogation tool in order to extract information leading to further investigation (notwithstanding the acknowledged ‘oppression’ concerns), as well as for the semi-evidential/semi-investigatory purposes mentioned above, but without the interview or information acquisition safeguards under PACE or elsewhere. This should be a reason to be concerned.

⁶³See above n 42.

⁶⁴PACE, s 76(8); *R v Mason* [1987] 3 All ER 481; *R v Heron* (1993) *Times*, 22 November.

⁶⁵Standard Operating Procedure Title: Polygraph for Post-Convicted Sex Offender Management (version 1, March 2022) – Redacted.

4. Foreseeability of relevant law

The Ministry of Justice Polygraph Examination Framework notes that ‘polygraphing an individual outside the legislative and policy framework may breach their Article 8 [ECHR] right to privacy’.⁶⁶ Yet, for police use of the polygraph, it is admitted that there is no specific UK law; rather, polygraph examinations will be conducted with regard to PACE and the Human Rights Act 1998. As discussed above, however, there appears to be little consistency or coherence in the application of these frameworks, with the testing process stated to be both within and outside PACE safeguards, and policies containing no clear boundaries around the extent of deployment.

(a) Foreseeability

As we briefly explained above, a legal rule authorising police operations needs to be both accessible and foreseeable to prevent arbitrariness in the application of the law. As the Strasbourg Court notes, domestic law must be sufficiently clear to give citizens an adequate indication as to the circumstances in which, and the conditions on which, public authorities are empowered to resort to any such measures.⁶⁷ Moreover, the law must indicate the scope of any discretion conferred on the competent authorities and the manner of its exercise with sufficient clarity to give the individual adequate protection against arbitrary interference.⁶⁸

It is not accidental that the twin requirements of accessibility and foreseeability have consistently featured in case law under Articles 5, 6, 8 (but also 10) of the ECHR. It is well-settled human rights law that the respective court must carry out a close examination of the procedural safeguards embedded in the system to prevent arbitrary encroachment on individual rights.⁶⁹ To summarise: the ECtHR has consistently held that a measure cannot be regarded as valid law, unless it is formulated with sufficient precision. This will enable citizens to regulate their conduct, and to foresee – if necessary with appropriate legal advice – the consequences of their actions.⁷⁰

The question, therefore, is what mechanisms have been put in place to minimise arbitrariness to the extent that this is possible. The answer cannot be given in a procedural vacuum. The Court of Appeal in *Bridges* accepted that the more intrusive the act, the more precise and specific must be the law said to justify it.⁷¹ There would appear to be little reason to doubt that subjecting a person to a polygraph interview, an interrogation tool designed to extract adverse statements, is likely to be regarded by the courts as sitting at the higher end of intrusiveness, bearing in mind the bodily interference and discomfort⁷² involved in the interview, the sensitive biometric data collected, the long, choreographed questioning processes, as well as the opaque and incontestable conclusions about deceptiveness drawn from the process (the validity of which is itself contested).

It might be argued that polygraph interviewing of offenders, or even suspects, sits on a comparatively lower scale than, say, the collection and retention of DNA samples of those who were suspects of crime but not convicted⁷³ or the scanning of ‘innocent’ crowds by a live facial recognition tool.⁷⁴ The fact remains, however, that the polygraph is a physically intrusive, unscientific (and, thus, of questionable necessity), technique involving the collection and analysis of sensitive biometric data, and furthermore (as we discussed above) raises far more fundamental issues of scientific validity than facial recognition.

⁶⁶See above n 42.

⁶⁷See for instance ECtHR *Roman Zakharov v Russia* Application No 47143/06, 4 December 2015, para 229; ECtHR *Ekimdzhiiev v Bulgaria* Application No 62540/00, 28 June 2007, para 75.

⁶⁸Ibid.

⁶⁹ECtHR *Cumhuriyet Vakfi and Others v Turkey* Application No 28255/07, 8 October 2013, para [63].

⁷⁰ECtHR *Ashlarba v Georgia* Application No 45554/08, 15 July 2014, para 35.

⁷¹See above n 14.

⁷²This can be attested to by the authors of this paper themselves.

⁷³ECtHR *S and Marper v UK* [GC] Applications Nos 30562/04 and 30566/04, 4 December 2008.

⁷⁴See above n 14.

Facial recognition ‘works’ even though it may often generate (measurable) errors. Of course, everything – including the polygraph – is relational, and intrusiveness might, under different circumstances, be offset by the tool’s reliability or utility. But no impartial stakeholder, not even the UK Government, asserts that the polygraph is based on valid science. The very existence of OMA 2007, section 30,⁷⁵ and of the use immunity enshrined therein, presupposes the inadmissibility of polygraphic evidence.

Although (as discussed in *Bridges*) local policies could constitute part of the relevant law, as far as we are aware, the documentation disclosed via the FOI responses is not widely circulated or published, nor does it suggest a consistent approach across police forces in England and Wales as regards the circumstances in, and conditions under which, the polygraph will be deployed. There appears to be a significant risk that police conduct, as per the policy and guidance documents, may not satisfy the ‘quality of law’ requirement, as being insufficiently precise. It is anything but clear who will be subject to polygraph interviews, in which circumstances and subject to which safeguards. It is also unclear, indeed it is irrational, to assume that polygraph interviewers will draw rational – ie verifiable – conclusions. To use language deployed by the ECtHR, ‘[s]uch a lack of transparency, at the very least, can hardly meet the requirement of foreseeability, this in turn being one of the preconditions for the lawfulness of any interference with the rights protected by Article 8 of the Convention’.⁷⁶

Furthermore, common law cannot authorise ‘intrusive’ ways of obtaining information, such as entering private property, acts constituting assault⁷⁷ or covert surveillance.⁷⁸ Purshouse and Campbell contend that ‘forms of “physical” intrusion, such as DNA sampling and bugging private property, fall beyond the scope of the common law powers of the police, thus requiring a more narrowly prescribed legal basis’.⁷⁹ Relying on the case of *Collins*,⁸⁰ they also suggest that ‘as well as physical intrusions, excessive demands to answer questions, including the use of actual or implicit threats, fall outside of the common law powers’.⁸¹ The physically intrusive nature of the polygraph test, combined with the power-imbalance surrounding its deployment by the police, would likely remove polygraph interviews by the police from the remit of the common law.

(b) Polygraph methodology and implications for foreseeability

Polygraph subjects need to be able to know which methodology their interviewers will rely on to assess their physiological data. This goes to the heart of the problem, for such a methodology based on a reliable scientific basis is simply absent. As a result, neither citizens nor indeed anyone else can reliably predict either in advance or ex post facto how physiological data will be assessed and which conclusions regarding truthfulness *should* (not) be drawn.⁸²

Early on in the history of the polygraph it became clear that ‘wide divergence’ in the structure of the respective interview is inevitable due to the ‘widely varying types of questions, examiners, and examinees’.⁸³ The complex interaction between the examiner and the examinee show that lack of standardisation signals a feature, not a bug in the system. Although it is understandable in a policing context that

⁷⁵Section 30 Use in criminal proceedings of evidence from polygraph sessions. (1) Evidence of any matter mentioned in subsection (2) may not be used in any proceedings against a released person for an offence. (2) The matters so excluded are— (a) any statement made by the released person while participating in a polygraph session; and (b) any physiological reactions of the released person while being questioned in the course of a polygraph examination. (3) In this section “polygraph examination” and “polygraph session” have the same meaning as in section 29.’

⁷⁶*Big Brother Watch v UK*, concurring opinion, para 12; joint partly concurring opinion of Judges Lemmens, Vehabović and Bošnjak.

⁷⁷See above n 29.

⁷⁸*Malone v United Kingdom* (1984) 7 EHRR 14, 79.

⁷⁹See above n 15.

⁸⁰*Collins v Wilcock* [1984] 1 WLR 1172.

⁸¹See above n 15.

⁸²ECtHR *Plechkov v Romania* Application No 1660/03, 16 September 2014, para 71.

⁸³*Scientific Validity of Polygraph Testing: A Research Review and Evaluation*, above n 20, p 11.

each test is bespoke to the individual, what is lacking is a scientifically provable, reliable and repeatable method to determine whether a statement made is truth or lie, or even if a statement indicates deception. Ultimately, therefore, the term ‘test’ is a misnomer. The polygraph procedure is at best an interrogation technique, yet lacking in appropriate procedural protections, as discussed above. This creates the tangible risk of arbitrariness and lack of foreseeability, which according to the ECtHR is more than half the way to a violation of human rights. Proponents of polygraph testing may point to the references in policy to APA ‘standards’ and training requirements. Unlike other frameworks, such as forensic science regulation,⁸⁴ designed to ensure accurate and reliable scientific evidence and validation of methods, APA policies⁸⁵ lay out processes developed by the polygraph industry itself, designed for a US context, absent the rigour of independent validation or assessment of techniques deployed.

The methodology and the rules on which scientific validity is based should, by definition, be articulated, scrutinised and capable of being rejected. Lacking clear operational procedure and rules of assessment for polygraphic data deprives both suspects/offenders (and their representatives) and polygraph interviewers or fact-finders of the ability to make an informed decision. A polygraph interviewer alas cannot follow any rule, for there is no standardised way to conduct an interview or assess the data. They cannot work out which inferences are to be drawn by consulting, say, an authoritative table showing the probative force of certain physiological patterns. Therefore, we continue to lack a reliable and replicable method accessible to polygraph examinees and their legal representatives.

(c) Necessity and proportionality

In a recent (2023) case, *David*,⁸⁶ the appellant, a serious sex offender, challenged a positive obligation in an SHPO⁸⁷ that required him to comply with any instruction from his offender manager or the police to attend polygraph/integrity screening and to comply with any instructions during those sessions by the person conducting the assessment. This requirement applied save where there was ‘good reason’ not to do so.

(i) Necessary, clear and effective

The Court considered previous case law relating to the reasonableness of requirements and restrictions imposed in SHPOs made under the Sentencing Act 2020. It noted in its judgment the case of *Parsons*,⁸⁸ which held: (a) that no order should be made unless necessary; and (b) if necessary, then the prohibitions imposed must be effective, clear and realistic. It was held in *David* that the judge imposing the SHPO had not stated why the polygraph interview requirement imposed was not only necessary but also proportionate and sufficiently clear, such statement being required by the statute. The SHPO was drafted in terms which were too wide and vague, and was therefore disproportionate and oppressive. The SHPO required the appellant for the rest of his life to take a polygraph test for any reason, or for no reason at all. The remit was not defined, and it was impossible for him to predict whether he had good reason to refuse to comply.⁸⁹ The Court also noted that the SHPO already contained a comprehensive set of measures designed to protect the public from sexual harm, raising questions as to why the polygraph testing requirement was necessary.

However, submissions made by the appellant in *David*, based on rights under Article 6 and Article 8 of the ECHR, were not considered to have any merit. The Court held that neither criminal nor civil rights

⁸⁴Forensic Science Regulator: Code of Practice’ (April 2023), <https://www.gov.uk/government/publications/statutory-code-of-practice-for-forensic-science-activities/forensic-science-regulator-code-of-practice-accessible>.

⁸⁵See https://www.polygraph.org/policies_and_acts.php.

⁸⁶See above n 13.

⁸⁷Pursuant to s 175 of the Police, Crime, Sentencing and Courts Act 2022, amending the Sentencing Act 2020, that permits positive requirements to be imposed provided these are necessary to protect the public from sexual harm.

⁸⁸*Parson (Hayden Graeme)*; *Stuart James Morgan* [2017] EWCA Crim 2163.

⁸⁹*David*, paras 23–27.

were engaged, as the polygraph requirement was being used as a safeguarding tool, and in the context of prohibitions imposed pursuant to the Sentencing Act 2020, ‘any interference will be in accordance with law and justified as permitted by Article 8’.⁹⁰ This latter rather perfunctory assessment did not address the requirements of the accessibility and foreseeability of the law in any depth. Neither did the Court take account of the lack of specificity of the positive requirements in the amended Sentencing Act; the nature of those requirements as they relate to the polygraph is not mentioned in the statute.

(ii) *Grounds for future proportionality challenge?*

Note that *David* was decided in the context of statutory provisions mandating requirements in an SHPO to be ‘necessary’ to protect the public from harm. We cannot therefore merely read across the principles in the decision to any future necessity and proportionality challenge to *non*-statutory uses of polygraph testing by the police, potentially based on the four-part *Bank Mellat* test.⁹¹ Murray distils this test into two main criteria: why is a deployment required; and what alternative mechanisms are available?⁹² When determining necessity for rights interference in terms of the existence or otherwise of a ‘pressing social need’ for the measure in question, it is not merely a matter of demonstrating usefulness, relevance or concerns around security, cultural issues or public opinion.⁹³ The test requires an assessment of the alternative means that could be deployed and which may be less rights-infringing (as the judge pointed to in *David*), therefore involving an assessment of potential impact,⁹⁴ and a final balancing stage involving ‘normative evaluation and judgement’.⁹⁵ Despite the disparate concepts of proportionality found in English law,⁹⁶ we might reasonably predict that the issues of vagueness/clarity, the wide breadth of the power,⁹⁷ their effectiveness and in particular consequences of refusal highlighted in the *David* judgment would likely be crucial factors in any proportionality decision, as would the alternatives to polygraph testing available to achieve the desired objective and the existence (or otherwise) of independent safeguards or oversight.

Whilst a wide margin of appreciation is permitted by the courts in issues of public security, procedural safeguards remain crucial,⁹⁸ which – as demonstrated above – are lacking for non-statutory police uses of the polygraph. Furthermore, the state’s margin of appreciation⁹⁹ in respect of qualified rights is not unlimited where issues of individual vulnerability or personal and family life are in play.¹⁰⁰

Relatedly, the Court of Appeal in *Bridges* regarded the complainant’s brief interaction with the live facial recognition scanning as involving only ‘negligible’ impact.¹⁰¹ The impact for polygraph interviewees cannot be described in a similar way. It is therefore arguably surprising that ‘effectiveness’, in terms of (lack of) scientific validity, likelihood of error and consequential impact on the proportionality assessment, was not addressed head-on by defence submissions in *David*. However, potential issues with

⁹⁰*David*, para 20.

⁹¹*Bank Mellat v HM Treasury (No 2)* [2013] UKSC 39: (a) is the objective sufficiently important to justify limiting a fundamental right (a pressing social need)? (b) are the measures which have been designed to meet it rationally connected to it? (c) are the means used to impair the right or freedom no more than necessary to accomplish the objective? (is a less intrusive measure available?) and (d) does the measure strike a fair balance between the rights of the individual and the interests of the community?

⁹²D Murray ‘Using human rights law to inform states’ decisions to deploy AI’ (2020) 114 *AJLL Unbound* 158.

⁹³ECtHR *Dudgeon v UK* Application No 7525/76, 22 October 1981.

⁹⁴Above n 92.

⁹⁵J Rivers ‘The presumption of proportionality’ (2014) 77 *Modern Law Review* 409.

⁹⁶For discussion of this, see A Ramshaw ‘The case for replicable structured full proportionality analysis in all cases concerning fundamental rights’ (2019) 39(1) *Legal Studies* 120.

⁹⁷ECtHR *Perry v United Kingdom* Application 63737/00, 17 July 2003.

⁹⁸ECtHR *Big Brother Watch v UK* Application Nos 58170/13, 62322/14 and 24960/15, 13 September 2018.

⁹⁹ECtHR *Handyside v United Kingdom* Application No 5493/72, 7 December 1976.

¹⁰⁰*Fedotova and Others v Russia* [GC] Application Nos 40792/10, 30538/14 and 43439/14, 17 January 2023.

¹⁰¹Above n 14.

access to independent scientific experts may mean that such arguments are more difficult for defence counsel to make.

(iii) Equality and bias

The discussion around scientific validity in *Bridges* was confined to issues of bias within the tool on sex and race grounds, and to consequent failure to comply with the public sector equality duty in the Equality Act 2010.¹⁰² In comparison, discussion of issues of equalities and discrimination were absent from the documentation received in response to our FOI requests. Although the 2023 national polygraph examination policy stated that polygraph examiners were trained to carry out an assessment of mental capacity,¹⁰³ we found no indication in police information disclosed of the results of any equality impact assessments (EIA), nor any indication that polygraph interviewees had access to independent medical assessment in relation to any physical or mental conditions. In contrast, a 2023 EIA¹⁰⁴ relating to a Bill states that some people with neurodiverse needs would ‘not’ be suitable for testing, including those with memory loss or dementia, and caution would be needed for people with learning difficulties.

(iv) Oppressiveness and disproportionality

The issue of oppressiveness¹⁰⁵ – linked to disproportionality and which the Court found so important in *David* – also looms large in the documentation disclosed pursuant to our FOI requests. For the consequences of refusing a polygraph interview are potentially serious, indeed existential, for the individual. What reasons would be considered ‘good’ enough for a suspect or a person offered a conditional caution for instance to refuse to take a test? Could concerns over scientific validity or lack of information provided to advisers cross this threshold? In terms of information provided to the interviewee, Norfolk Constabulary told us:

We **do not** give the examinee anything in writing regarding the pre and post-test. These phases **are not explained to the examinee** other than informally telling them that we will be asking them questions around their health and welfare and then questions surrounding their family life, free time, employment, etc, to get to know them better. We then explain that we will go through the questions we intend to ask them and that these can be re-worded, deleted or exchanged for another question, if required ... With regards to the post test, we explain prior to the test that once we have completed the test, it will be marked, and they will be given the result prior to them leaving. We will also give them an opportunity to explore any questions that they may fail on. We **do not have any legal representation** involved in the polygraph procedure. (emphasis added)

Subject access requests are likely to result in only limited information disclosure, as the 2023 Operational Procedures recommend that ‘the audio/visually recorded footage and polygraph chart data is exempt from all subject access requests to protect sensitive tactics’. From a data protection perspective, therefore, individuals and their advisers would be unable to review the accuracy and completeness of the output, inferences and conclusions generated by the testing process. Thus, both data protection and access to legal advice, as safeguards, lack teeth. This is compounded by the risk of oppressiveness by way of misleading claims made in some documentation about the polygraph’s truth-revealing qualities, thus leading the interviewee to believe – incorrectly – that the polygraph can detect lies and truths.

¹⁰²Equality Act 2010, s 149.

¹⁰³National Polygraph Examination Policy (Standard Operating Procedure) 14 March 2023, para 20.1.

¹⁰⁴‘Polygraph testing measures in the Police, Crime, Sentencing and Courts Bill: Equalities Impact Assessment’ 2 August 2023, available at <https://www.gov.uk/government/publications/police-crime-sentencing-and-courts-bill-2021-equality-state-ments/polygraph-testing-measures-in-the-police-crime-sentencing-courts-bill-equalities-impact-assessment>.

¹⁰⁵Above n 22.

(v) Proportionality predetermination

Proportionality, as a legal test and standard, should ‘reach-back’ to shape the policy-making process and practical operations.¹⁰⁶ However, assessments of proportionality in ex ante impact assessments ‘might be shaped in a way to reinforce, rather than challenge, the starting assumptions that underpinned the initial policy formation’.¹⁰⁷ Fussey and Sandhu point to a tendency to view public safety as the ‘higher purpose’ over citizen’s rights, misconstruing the characterisation of proportionality ‘in terms of achieving policing aims rather than addressing the degree of rights interference’,¹⁰⁸ ie as a post facto rationalisation (attempt) of a decision influenced by political ideology.

The National Polygraph Examination Policy states (in respect of the Human Rights Act 1998): ‘The examination of sexual offenders and persons arrested/interviewed for offences of IIOC is done with the consent of the subject and is proportionate to what it seeks to achieve in terms of risk assessment’. In respect of necessity, the policy states: ‘Police must take reasonable action to protect the general public, particular individuals and groups, from serious harm and re-victimisation.’ The polygraph, it stresses, ‘is necessary to fully assess the risk a subject presents and take the appropriate action to address such risk’.¹⁰⁹ Both statements suggest a predetermined blanket conclusion of necessity and proportionality for the policing purposes covered by the policy, despite the polygraph’s lack of a sufficiently reliable scientific basis, and a risk, as Katwala succinctly puts it, of succumbing to a ‘natural instinct to give [a flawed technology] more weight than it deserves, or to use it as psychological prop or a propaganda weapon’.¹¹⁰

5. Moving forward

(a) Transparency and candour

Clause 73 (‘Ethical policing (including duty of candour)’)¹¹¹ of the now-abandoned Criminal Justice Bill would have required the College of Policing to issue a Code of Practice setting out actions for the purpose of securing that the police act ethically. Acting ethically was stated to include ‘acting in an open and transparent way in relation to the way in which the police have conducted themselves’, except where doing so would prejudice national security, prevention, detection, investigation or prosecution of any offence, or other public interests.

The opacity surrounding polygraph interviewing by the police, including the limited information provided to examinees about the testing process, the exclusion of legal representatives from the test, the de facto derogation from PACE, as well as the inconsistencies uncovered in the FOI responses themselves, are all factors pointing to the critical nature of a ‘duty of candour’.¹¹² An undertone of equivocation, rather than candour – potentially at odds with police forces’ duty of advice and assistance under the Freedom of Information Act¹¹³ – might be discerned in the following extract from minutes of a National Polygraph Working Group, in which it was noted that forces were receiving FOI requests from a variety of sources:

FOI- every force receiving requests pertaining to Polygraph- always been a drip feed but received a lot of late-...taken out some personal and commercial matters- bits that are tactical and may undermine operational policing- **more difficult to do so now**- ICO changes etc- struggling to

¹⁰⁶F de Londras and J Tregidga ‘Rights, proportionality, and process in EU counterterrorism lawmaking’ (2021) 19(2) *International Journal of Constitutional Law* 665.

¹⁰⁷Ibid.

¹⁰⁸P Fussey and A Sandhu ‘Surveillance arbitration in the era of digital policing’ (2020) 26 *Theoretical Criminology* 3.

¹⁰⁹National Polygraph Policy v12 ongoing, updated 14.03.23 (working Polygraph Operational Procedures) – Redacted.

¹¹⁰A Katwala ‘Zombie forensics’ *New Humanist* (28 March 2024).

¹¹¹Criminal Justice Bill 010 2023–24. This Bill was dropped in the wash-up prior to the 2024 general election.

¹¹²The dangers of operating in accordance with an unpublished, blanket policy, contrary to a published policy, were highlighted recently in the case of *XY v Secretary of State for the Home Department* [2024] EWHC 81 (Admin).

¹¹³Freedom of Information Act 2000, s 16.

redact much at all- bear in mind with conduct of meetings going forward approach was sent to GC and I for **coordinated approach**- volume high- met with NPCC CRU agreed that they will instigate a national referral process-...some data has gone out previously- shut door after horse has bolted- **difficult to hold some info back**- CRU will be able to hold some matters back.¹¹⁴

The protections offered in theory by the human rights and criminal justice frameworks will be stymied without an independently-enforced requirement for transparency and candour regarding the extent of polygraph testing within policing, the policies pursuant to which polygraph interviews are carried out, and the errors and risks involved in its use.

Conclusion

Our findings raise questions around the lawfulness and procedural fairness of the non-statutory regime described above, and add another dimension to the perennial question about the flexibility of police common law powers versus a codified regime of powers and rights, mandatory policies and codes. Many of the purposes for polygraph testing disclosed are both surprising and concerning, including high-stakes decisions around child contact and the imposition of polygraph interviews as a ‘mandatory’ requirement for receiving a conditional caution. Bearing in mind the contested scientific nature of polygraph testing, there is a serious risk of police actions being led in the wrong direction, thus undermining public trust in policing and the moral legitimacy of the law.

Despite the clear links between polygraph testing and the investigatory and intelligence-gathering processes, police deployment of the polygraph in risk assessment and intelligence contexts falls into a legal twilight zone, said to be both subject to PACE, yet also outside its remit, with interviewees denied legal representation during the interview itself. Legal protections are reduced, due to the deployment of polygraph testing in contexts which are described as risk assessment, ‘non-evidential’ or safeguarding; yet the lines between these activities and investigatory or evidential processes are blurred to say the least. The results of a polygraph examination can have life-changing consequences for the individuals involved. Without urgent clarity, or case law, we fear that police forces and governmental departments risk a landmark ‘abuse of power’ case, with compensatory, operational and reputational consequences.

We thus strongly urge the College of Policing, in view of its new remit, to establish a National Polygraph Training School,¹¹⁵ to conduct a full and independent review of all (statutory and non-statutory) uses of polygraph interviews involving police forces. This review should cover the scientific validity of such uses and the processes surrounding them, including those redacted from responses to our FOI requests, and the full gamut of legal issues arising, not only those we have discussed in this paper but other relevant issues requiring further research and consideration, including privacy, reliability and duties of care. Notwithstanding, the documentation disclosed clearly indicates that at least some police forces (that we know of) intend – or have possibly already started – to deploy polygraph interviews for the investigation of non-sexual offences, bringing the polygraph ever closer to a standard operational process in policing. If an unscientific process such as the polygraph interview becomes mainstream within policing in England and Wales, what will the future hold? ‘Emotion AI’, perhaps, the premise for which is equally contested but arguably not physically intrusive?¹¹⁶ A recent report from the Alan Turing Institute comments:

¹¹⁴National Polygraph Working Group minutes (June 2023) (emphasis added). We can reasonably assume that this excerpt is also referring to our own FOI requests.

¹¹⁵M Wilding and C Milmo ‘UK police forces rapidly expanding use of controversial lie detector tests’ *inews* (31 December 2023), <https://inews.co.uk/news/uk-police-forces-expanding-lie-detector-tests-2822226>.

¹¹⁶And categorised as a high-risk system in the law enforcement context by the EU AI Act: [AI-Regulation.com](https://ai-regulation.com) ‘Tools for navigating the EU AI Act: final text with interactive table of contents’ (February 2024), <https://ai-regulation.com/wp-content/uploads/2024/02/AI-Act-ToC.pdf>.

Current laws are failing to keep pace with changes to biometric technology, which risks undermining public confidence and trust in these systems. Most notably, the current legal framework **does not adequately distinguish** between tried and tested, **scientifically valid** biometric systems (such as fingerprint identification, DNA analysis and facial matching) and novel, **often untested** inferential or classificatory systems – such as age estimation, emotion recognition and gait analysis.¹¹⁷ (emphasis added)

Intrusive methods¹¹⁸ in other sensitive contexts such as deployment by the intelligence agencies are subject to independent oversight and authorisation. Therefore, we conclude that it is time to abandon the reliance on the common law and a jigsaw of general statutes, and put in place ‘police law for technology’, covering risk assessment, non-evidential, intelligence and safeguarding purposes, as well as crime-investigation and evidential contexts, with genuine transparency and independent pre-approval processes to determine whether – and if so, how – the police should be permitted to deploy the polygraph and other contentious technologies.

¹¹⁷Above n 8.

¹¹⁸Such as bulk surveillance (Investigatory Powers Act 2016), use of covert human intelligence sources and directed surveillance (Regulation of Investigatory Powers Act 2000).