TRUTH OR DARE?

WHAT LIES BENEATH THE POLYGRAPH TEST?
In December 2000 the King Commission’s proposals to fight match fixing in cricket included the use of so-called ‘lie-detector’ tests. The recommendations were not well received. Little is known about the polygraph and this could lead to resistance. Debbie Collier asks a twofold question: how reliable is the test and does it constitute an unjustifiable invasion of privacy?

In the past four months I have had several labour law clients involved for the first time in polygraph testing. All indications are that the polygraph test will become a more prominent feature in our law and I hope the conclusions from my investigations which are shared with you in this article will be of some assistance.

Technically the polygraph test is one of numerous lie-detector tests. Until recently the test was considered unsophisticated and unreliable and its use invasive and undesirable. Developed for use by law enforcement agencies in the USA in the 1920s, it was only in the 1960s that its use extended to business and industry.

The test is used with varied intensity in countries such as the UK, the USA, Canada, Japan, Turkey, Israel, India, Poland and Yugoslavia whereas Russia, some western European countries, and Australia are less inclined to embrace the test. The Polygraph Association of South Africa (PASA) has jurisdiction over the test in South Africa. For information on PASA see www.pasa.co.za.

What is the polygraph test?

A polygraph is a measuring device that makes a permanent recording of physiological changes to respiration, blood pressure, pulse, and skin current or galvanic skin response associated with the sweating of palms, which changes take place as a result of certain psychological stimuli – in this instance the asking of questions.

In other words, the polygraph test records changes generated by emotional stress that could be caused by a number of factors including, but not limited to, lying. It does not, as such, record a lie but a physiological response generated by stimuli (the questions) put to the examinee. For this reason, in 1986 the American Medical and Psychological Associations found that polygraphs were ‘unreliable and inappropriate for the use in the workplace’.

The most used testing technique is ‘the control question’ or the CQT. The theory behind the technique relies on the principle of psychological set that maintains that a person will channel his fears and anxiety to the area of biggest threat. Whereas a truthful person would respond more to the control questions on the test, the deceptive examinee will respond more to the relevant questions as they present the bigger threat.

The test operates off the autonomic nervous system. ‘Autonomic’ means automatic or involuntary, as it deals with those aspects of the body that cannot be controlled. For example, if you are approached by an ominous figure in a dark alley your heart contracts quickly, sending more blood through the body to provide nourishment so that it can function more effectively. Your liver secretes sugar for energy and the pupils of your eyes dilate so that you can see better. The palms of your hands perspire so that you can grasp more effectively. In this state you can run faster, hit harder and lift more.

The polygraph test measures a similar response. If you lie you become afraid of being caught in that lie and your body automatically shifts into the emergency system.

Between two and seven relevant questions will be asked during any one examination. There are certain other questions of an irrelevant and control nature that will be asked during the actual examination. All of the questions are discussed with the examinee prior to the test being taken. There are no surprises.

Three important variables that can affect the accuracy of the polygraph test are the qualities of the examinee, the mental and physical state of the subject and the setting in which the examination takes place. It appears to be common cause that the examinee is the single most important variable in determining the reliability and validity of polygraph tests. It has been suggested that ‘one of the essential problems with the widespread use of polygraph tests is not so much the test itself, but rather inadequately trained and incompetent examiners.’

The three phases of testing

The polygraph test should consist of three phases:

- a preparation/pre-test interview phase;
- the collection of polygraph charts, and
- a post-test interview.

During the first phase the examiner gathers details in a non-accusatory interview on the case and the person to be tested. The test questions are developed and put to the examinee.

The second phase sees the collection of polygraph charts. Three types of sensors are attached to the examinee. These are the pneumographs (respiration), GSR (galvanic skin responses) and cardiograph (blood volume, pulse and blood pressure) sensors. The examinee is asked the test questions at least twice and his physiological responses are recorded.

At the post-test interview stage the examinee is questioned about his responses to any relevant questions. A numerical scoring system is then used to analyse the examinee’s polygraph charts to determine if there are any significant responses.

Polygraph testing and labour law

In the labour field there are two uses for the polygraph test. The first is to ascertain an employee’s involvement in a specific incident, for example, theft and the second is as a tool for pre-employment screening.

No law in South Africa specifically prohibits the use of the polygraph test provided the examinee consents in writing before the examination starts. However, consent itself is often, arguably, not voluntary. An employee or applicant will be aware that it will be noted in her file that she refused to take a polygraph test and this places undue pressure on the individual to the extent that it could be argued that her consent is not free and voluntary.

In the United States of America the Emp-
ployee Polygraph Protection Act of 1988 (EPPA) regulates its use in the labour environment and the employer is permitted to use polygraph testing for specific incident investigation only.

Three pre-conditions imposed by the EPPA are that the employee must have had access to the property that is the subject of the investigation; there must be a reasonable suspicion that the employee was involved in the incident; and the employer must have suffered economic loss or injury. Specific incidents include theft, embezzlement, misappropriation of property or specific acts of industrial espionage or sabotage.

In terms of the EPPA the employer may discipline or dismiss an employee only if there is supporting evidence in addition to the test results. In terms of the EPPA the right of access and reasonable suspicion constitute supporting evidence.

Similar specific incident testing seems to be the most frequent type of polygraph testing currently in South Africa.

**Pre-employment screening**

The notion of pre-employment screening is that it is an invaluable tool for personnel risk management, particularly in high-risk employment situations. It is not intended to delve into the private life and thoughts of the applicant; but rather to analyse areas of concern, such as honesty, to a prospective employer. Failure of the test does not exclude the possibility of employment of the examinee.

In the USA, in terms of the EPPA, pre-employment screening is banned although various employers such as federal, state and local government and National Security and Defence are exempt. In these cases, for example, pre-employment screening has revealed applicants who have been involved in unsolved homicides, forcible rape, and in armed robberies.

In December 1999 the SABC reported that applicants for the elite Scorpions Unit (a high level crime-fighting agent) would be subjected to a polygraph examination indicating that in South Africa polygraph tests are being used not only for specific incidents but also for recruitment (pre-employment screening) and promotion purposes.

**Limitations**

A conservative approach pegs polygraph accuracy at around 70% to 90%. This renders it favourable evidence provided there are supporting evidence and the examinee's credentials and other variables are scrutinised. Supporters of the test furthermore point out that the courts accept the result of breathalyser tests and speed-checking devices and various forensic tests despite disagreement among the scientific community about their reliability.

Can you beat the test? Factors that may influence the results of a polygraph examination include certain severe psychological conditions. Mentally challenged individuals might be found unfit to take a polygraph examination.

It is not possible to 'beat' the test by taking drugs that calm the nervous system. At best this could result in a difference in the size of the responses.

Although unlikely, an examinee familiar with the control question technique may be able to manipulate the results by lying on the control questions and hence reducing the difference in the size of the responses.

Constitutional considerations include possible infringements of the fundamental rights of individuals against unlawful search and seizure, self-incrimination and invasion of privacy. Clearly, hidden microphones or two-way mirrors would constitute an invasion of privacy.

Furthermore, chapter II of the Employment Equity Act 55 of 1998 prohibits various forms of employment testing such as medical and psychological tests and other similar assessments. Whether or not the use of pre-employment screening falls under the 'similar assessments' umbrella is a contentious and, as yet, unresolved issue.

While having to take a polygraph test in order to gain or protect employment is an invasion of privacy the other side of the coin is an employer's right to protect his property. Privacy, however, should give way only if the employer can prove sufficient interest.

**Is a polygraph result admissible in a court?**

In the USA, in the 1995 decision of United States v Posada 57F 3d 428 the court suggested a three-step enquiry into the admissibility of polygraph test results, namely 1 whether the evidence is relevant and reliable; 2 whether the evidence assists the court in determining the facts in issue; and 3 whether the evidence has an unfairly prejudicial effect, if it does, that would substantially outweigh its probative value.

There is no decisive case law in South Africa. CJ Munks, presiding officer of the Labour Court in M Shinga vs Gi/bey's Distillers And Vintners (Pty) Limited (case no N11/2/10237, 1999, Durban) states that: "... the respondent's attorney points out correctly that "there is still no uniform approach to the admissibility of polygraph tests"."

Reference was then made to the August 1998 edition of Contemporary Labour Law. A lengthy quotation from an article by Marylyn Christianson was referred to, including the following:

"... if the examiner is well qualified and trained, the possibility that the results of a polygraph test will be admitted as evidence in a disciplinary enquiry or by the appropriate dispute resolution body will be greatly increased."

"... I agree that where a polygraph test has been performed by a properly trained examiner and the employee has voluntarily taken the test, provided of course that the polygraph is considered admissible on the facts of the case, then a negative outcome in the sense that the employee fails the test is a relevant evidentiary fact and should be taken into account together with the evidence in its totality."

**Conclusion**

Despite the controversy surrounding it, it is a reality that the use of polygraph testing is on the increase in South Africa. It is seen to be a quick and cost-effective tool in the fight against crime.

Regulation of the polygraph profession is necessary and is already under way. PASA hopes that a register of professional polygraph examiners will be established under the auspices of the Health Professions Council of South Africa.

Legal regulators will do well to recognise the EPPA as a useful backbone to develop a procedure or code of good practice for the polygraph test to be adopted into the South African labour dispensation.

**Acknowledgements**

2 Polygraph Truth Verification Services CC, The polygraph: some critical questions Answered, and pre-employment polygraph screening
3 www.pasa.co.za

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