Polygraph Evidence in South African Labour Law: Admissibility, Value and Misconceptions

By Hercú Turner – NextGen Workforce Solutions (Pty) Ltd

13/04/2026

Introduction

The use of polygraph evidence in South African labour disputes, particularly before the CCMA and the Labour Court, remains widely misunderstood. A persistent and often repeated claim is that polygraph evidence is inadmissible or has no legal value. This is incorrect.

South African law does not exclude polygraph evidence. Instead, the courts have developed a clear and consistent position: polygraph evidence is admissible and may be considered, but its evidentiary weight is limited. It does not stand alone as proof of misconduct, yet it remains valid evidence that can assist in determining credibility, probabilities, and the overall fairness of a decision.

The purpose of this article is to clarify the true legal position, dispel common misconceptions and demonstrate, through case law and scientific research, that polygraph testing is a legitimate, useful, and underutilised tool in labour dispute resolution.

The Legal Framework

Proceedings before the CCMA are governed by section 138(1) of the Labour Relations Act 66 of 1995, which allows commissioners to conduct arbitrations in a manner they consider appropriate to determine disputes fairly and quickly. This creates a flexible evidentiary framework in which formal rules of evidence do not strictly apply. Evidence is admitted based on relevance and fairness, and its weight is determined within the context of all the evidence presented. There is no statutory provision excluding polygraph evidence.

Within this framework, the Labour Court has, over time, consistently confirmed that polygraph evidence is admissible. This position was clearly articulated in Truworths Ltd v CCMA & Others (L C, Case No: JS 423/06, 2008), where the Court held:

“A polygraph test on its own cannot be used to determine the guilt of an employee… a polygraph test certainly may be taken into account where there is other supporting evidence.”

This statement is significant because it expressly confirms that polygraph evidence may be considered, placing it squarely within the body of admissible evidence considered by a decision-maker.

This approach was reaffirmed and developed in Mustek Ltd v Tsabadi NO & Others (Lc, Case No: JR 1385/11, 2013), where the Court stated:

“The result of a properly conducted polygraph is evidence in corroboration of the employer’s evidence and may be taken into account as a factor in assessing the credibility of a witness and in assessing the probabilities.”

Importantly, the Court expressly recognised polygraph results as evidence, confirming that they form part of the evidentiary material available to the tribunal.

Further reinforcement is found in Food & Allied Workers Union obo Kapesi & Others v Premier Foods Ltd t/a Blue Ribbon Salt River (2010) 31 ILJ 1654 (LC), where the Court accepted the use of polygraph evidence as part of the evidentiary assessment, thereby confirming its admissibility within labour dispute proceedings. Similarly, in Sedibeng District Municipality v SA Local Government Bargaining Council (2013) 34 ILJ 166 (LC), the Court acknowledged the use of polygraph testing in assessing employee conduct and integrity, further demonstrating that such evidence is recognised and considered within the legal framework.

At the level of the Labour Appeal Court, in SA Transport & Allied Workers Union & others v Khulani Fidelity Security Services (Pty) Ltd (2011) 32 ILJ 130 (LAC), the Court confirmed that polygraph results may be relevant in assessing honesty and suitability for continued employment.

Recent Labour Court jurisprudence continues to confirm this position. In Poggenpoel and Another v Commission for Conciliation, Mediation and Arbitration and Others (2025), the Court did not reject polygraph evidence. The Court confirmed that commissioners are required to evaluate all relevant evidence holistically and that polygraph evidence cannot be relied upon in isolation without supporting facts and proper foundation.

This is significant because it reinforces that the issue is not admissibility, but proper application. The Court’s concern was not whether polygraph evidence may be used, but whether it was used correctly within the broader evidentiary framework.

Similarly, in GIWUSA obo Malemone and Others v Mashaba N.O and Others, the Court upheld the fairness of a dismissal where employees refused to undergo polygraph testing in circumstances where they were contractually obliged to do so. The Court accepted that the instruction to undergo polygraph testing was lawful and rejected arguments that such testing constituted an impermissible psychological assessment. This confirms that polygraph testing is recognised as a legitimate tool within the employment context.

Taken together, these authorities directly contradict the misconception that polygraph evidence is inadmissible. The Labour Court has not only accepted polygraph evidence but has repeatedly confirmed that it may be considered, is recognised as evidence, and forms part of the material upon which credibility and probabilities may be assessed. Its

admissibility is therefore not in question. The real issue is not whether polygraph evidence may be used, but how it should be used and what weight should be attached to it.

The Polygraph Examiner as an Expert Witness

Within the evidentiary framework described above, the role of the polygraph examiner must be properly understood. The admissibility of polygraph evidence is not based on the instrument itself, but on the testimony of the examiner who interprets and presents the results. In law, the polygraph examiner functions as an *expert witness,* and the evidentiary value of polygraph results arises through that expert testimony.

Expert evidence is generally admissible where it concerns matters requiring specialised knowledge beyond that of the ordinary decision-maker. Polygraph testing falls squarely within this category. As outlined in the preceding section on the nature of polygraph evidence, the process involves the measurement and interpretation of physiological data using structured methodologies grounded in psychophysiology. The results are not self-explanatory and require expert interpretation. It is therefore the examiner, and not the instrument, who provides the evidentiary link between the recorded data and the conclusion reached.

This has important legal consequences. A polygraph report, in the absence of the examiner's testimony, constitutes hearsay and carries little, if any, probative value. The Labour Court has made it clear, most recently in *Poggenpoel and Another v Commission for Conciliation, Mediation and Arbitration and Others (2025)*, that a decision-maker cannot simply rely on the outcome of a polygraph test without understanding the basis upon which that outcome was reached. The inference of deception is not a factual finding but an expert opinion that must be explained and justified by the examiner. Without such explanation, the evidence lacks evidential substance.

Where the examiner does testify, the evidence is admitted and assessed as expert opinion. This places the polygraph examiner in the same evidentiary category as other recognised experts whose conclusions are based on interpretation and probability rather than direct proof. The examiner is required to establish their qualifications, explain the methodology employed, and demonstrate how the conclusion was derived from the data. Only once this foundation has been laid can the evidence be meaningfully evaluated.

However, the classification of the examiner as an expert witness also defines the limits of their evidence. As with all expert testimony, the opinion expressed is not determinative of the ultimate issue. The examiner does not establish misconduct, dishonesty, or guilt. The conclusion that deception is indicated remains an inference drawn from physiological patterns and must be weighed together with all other evidence. This is consistent with the approach adopted in *Mustek Ltd v Tsabadi NO & Others* and

reaffirmed in more recent jurisprudence, including *Rolfes Chemicals (Pty) Ltd v Moni N.O and Others (2024)*, where the Court emphasised that findings must be based on a holistic assessment of all evidence.

The role of the examiner therefore fits coherently within the broader legal framework governing polygraph evidence. Section 138(1) of the Labour Relations Act permits the admission of relevant evidence, including expert opinion, while the courts have clarified that such evidence is corroborative in nature. The examiner's testimony provides the necessary expert foundation for polygraph evidence to be considered.

Properly understood, the polygraph examiner is not a substitute for proof, but a contributor to it. Their evidence does not determine the outcome of a dispute, but assists the decision-maker in evaluating credibility, probabilities, and consistency within the totality of the evidence.

The Nature of Polygraph Evidence

A polygraph is often incorrectly described as a "lie detector." In reality, no instrument detects lies directly. Polygraph testing is more accurately described as a psychophysiological detection method, which records and analyses physiological responses that are associated with cognitive processing during questioning.

A polygraph instrument simultaneously measures multiple physiological systems, most commonly respiration, cardiovascular activity and electrodermal activity (skin conductance). These responses are not interpreted in isolation but are analysed comparatively across structured question formats by a trained examiner using standardised scoring techniques. As reflected in the scientific literature, including *A Respiration Primer for Polygraph Examiners*, the value of the polygraph lies in the pattern and consistency of responses, rather than any single physiological change.

Polygraph testing is therefore an indirect, evidence-based process. It does not produce automatic or mechanical conclusions. Instead, it requires expert interpretation grounded in established methodology. The conclusions reached are probabilistic rather than absolute, which is consistent with many accepted forms of forensic and expert evidence such as handwriting analysis, eyewitness identification, and even certain aspects of fingerprint interpretation.

Modern research further explains the physiological basis of polygraph testing through the concept of the orienting response, a well-established principle in psychophysiology. This response occurs when an individual is exposed to a stimulus that is meaningful or significant to them. Studies have shown that such stimuli can produce measurable physiological changes, including alterations in breathing patterns, heart rate, and skin conductance. Notably, respiration research demonstrates that suppression or changes in breathing are linked to attention and stimulus salience rather than general anxiety.

This is important because it directly addresses a common misconception. Polygraph testing does not measure nervousness. General anxiety tends to affect all responses uniformly, whereas polygraph analysis focuses on differential responses between relevant and comparison questions. It is this comparative structure that allows examiners to identify patterns associated with deception or truthfulness.

As noted in investigative research such as *The Polygraph as an Investigative Tool in Criminal Investigations*, polygraph testing measures the physiological effects associated with deception rather than deception itself. This distinction is critical. It explains why polygraph evidence must be interpreted within context and used alongside other evidence, rather than treated as a standalone determination of guilt.

Empirical research further supports the scientific standing of polygraph testing. In a comparative study by Jan Widacki and Frank Horvath, *An Experimental Investigation of the Relative Validity and Utility of the Polygraph Technique and Three Other Common Methods of Criminal Identification* (1978), polygraph testing demonstrated accuracy levels comparable to other forensic identification methods such as handwriting analysis and fingerprinting, and significantly higher than eyewitness identification when real-world conditions, including inconclusive results, were taken into account. Subsequent research, including research by Charles R. Honts conducted primarily from the 1990s onwards, together with validation studies and meta-analytical reviews referenced by the American Polygraph Association from the 1990s to the present, indicates that validated polygraph techniques can achieve accuracy rates generally in the range of approximately 80% to 90% under controlled testing conditions.

Taken together, the scientific and empirical evidence demonstrates that polygraph testing is not a speculative or arbitrary process. It is a structured, research-based method grounded in established principles of physiology and psychology. While without mistakes, it operates within the same evidentiary paradigm as many accepted forensic techniques, all of which rely on interpretation, probability, and the careful evaluation of patterns within data.

The Role of Polygraph as Evidence

Much of the confusion surrounding polygraph evidence arises from a failure to distinguish between admissibility and evidentiary weight. Polygraph evidence is admissible and may be placed before the CCMA or a court. The real issue is not whether it can be used, but how much weight should be attached to it. That weight depends on factors such as the presence of supporting evidence, how the test was conducted, and the overall strength of the case.

This distinction is important. The fact that polygraph evidence is not decisive on its own does not mean it cannot be used. Many forms of evidence are not conclusive in isolation, yet they remain admissible and valuable. Polygraph evidence falls within this category. It

is a legitimate form of evidence that contributes to the overall assessment of credibility and probabilities.

This position has been reinforced in more recent case law. In Rolfes Chemicals (Pty) Ltd v Moni N.O and Others (2024), the Court confirmed that findings in labour disputes must be based on a holistic assessment of all evidence, including credibility and circumstantial indicators. Polygraph evidence, while not determinative, forms part of this broader evidentiary matrix and contributes to the assessment of probabilities.

This distinction has been reaffirmed in more recent case law. In GIWUSA obo Malemone and Others v Mashaba N.O and Others, the Court confirmed that polygraph evidence is not determinative of guilt but remains relevant in assessing credibility and probabilities. This again illustrates that the limitation placed on polygraph evidence relates to weight, not admissibility.

Similarly, in Rolfes Chemicals (Pty) Ltd v Moni N.O and Others, the Court accepted that polygraph evidence forms part of the broader assessment of probabilities and must be considered together with other evidence, reinforcing its role as a contributing evidentiary tool.

A practical example illustrates how this works in context. An employee in a retail store is observed on CCTV taking a cooldrink and walking into a restricted back area. The employer is already dealing with ongoing stock losses. The empty cooldrink is later found in that back area. When the footage is reviewed, the employee is not seen paying for the item at any functioning pay point.

When questioned, the employee claims that payment was made at a pay point at the far end of the store. However, the employee is unable to identify the cashier or provide any verifiable detail. It is also established that the camera covering that pay point was not working at the time.

A polygraph test is conducted, and the results indicate deception in relation to whether payment was made.

In this scenario, the polygraph result is not used in isolation. It forms part of a broader body of evidence. The employer has direct evidence showing the employee in possession of the item, circumstantial evidence suggesting that no payment was made, inconsistencies in the employee's explanation, and a polygraph result that supports an inference of dishonesty.

When all this evidence is considered together, the balance of probabilities shifts in favour of the employer. The polygraph evidence strengthens the credibility assessment and supports the conclusion that the employee's version is unlikely to be true.

Comparative and Empirical Research

Empirical research provides important support for the reliability and practical utility of polygraph testing, particularly when it is understood and applied within its proper scientific and evidentiary context.

One of the most frequently cited comparative studies is that conducted by Jan Widacki and Frank Horvath, titled *"An Experimental Investigation of the Relative Validity and Utility of the Polygraph Technique and Three Other Common Methods of Criminal Identification,"* published in 1978 in the *Journal of Forensic Sciences* (Vol. 23, pp. 596–600).

In this study, polygraph testing was evaluated alongside three commonly used forensic identification methods: fingerprint analysis, handwriting analysis, and eyewitness identification. The results are particularly significant because they distinguish between outcomes where inconclusive results are excluded and those where they are included, reflecting both ideal and real-world conditions.

When inconclusive results were excluded, the study found that:

- Fingerprint analysis achieved 100% accuracy.
- Polygraph testing achieved approximately 95% accuracy
- Handwriting analysis achieved approximately 94% accuracy
- Eyewitness identification achieved approximately 64% accuracy

However, when inconclusive results were included, which more accurately reflects real investigative conditions, the results shifted significantly:

- Polygraph testing achieved approximately 90% accuracy
- Handwriting analysis achieved approximately 85% accuracy
- Eyewitness identification dropped to approximately 35%
- Fingerprint analysis dropped to approximately 20%

More recent research further supports these findings. As stated under the nature of polygraph evidence section, studies conducted from the 1990s onwards, including work by Charles R. Honts, as well as validation studies and meta-analytical reviews referenced by the American Polygraph Association, indicate that polygraph techniques employing validated methodologies typically achieve accuracy rates in the range of approximately 80% to 90% under controlled conditions.

These findings are important because they demonstrate that while some forensic techniques appear highly accurate when forced to produce definitive conclusions, their practical utility decreases when inconclusive outcomes are properly accounted for. In

contrast, polygraph testing maintains a high level of reliability and practical usefulness under real-world conditions.

These studies emphasise that accuracy is influenced by several factors, including the quality of the testing protocol, the experience of the examiner, and adherence to standardised procedures. This is consistent with other areas of forensic science, where reliability depends on proper application rather than the tool alone.

While polygraph testing is not without limitations, neither are other accepted forensic methods. Fingerprint analysis, handwriting comparison and eyewitness testimony are all subject to limitations and potential error. The existence of an error margin does not render a method invalid. Instead, it requires that the evidence be properly interpreted and evaluated within the context of all available information.

In this regard, polygraph testing falls within the broader category of accepted forensic and expert evidence. It is a scientifically grounded, empirically supported tool that, when used correctly, contributes meaningfully to the assessment of credibility and the determination of probabilities.

Polygraph as an Investigative Tool

Beyond its evidentiary role, polygraph testing has significant practical value as an investigative tool, particularly in environments where direct evidence is limited and decision-makers must rely on credibility, consistency, and probability.

Research in this field, including *The Polygraph as an Investigative Tool in Criminal Investigations*, confirms that polygraph testing is widely used internationally in both public and private sectors. Law enforcement agencies, intelligence services, and corporate investigators utilise polygraph testing as part of structured investigative processes rather than as a standalone determinant of guilt.

One of its primary functions is to guide investigations. Polygraph testing assists investigators in identifying areas that require further inquiry by highlighting inconsistencies or reinforcing particular lines of investigation. This is especially valuable in the early or “operative” phase of an investigation, where information is incomplete and multiple possibilities must be assessed.

Polygraph testing is also used to eliminate or narrow down suspects. In cases involving multiple individuals with access or opportunity, it provides an additional tool to distinguish between those who are likely to be truthful and those whose responses warrant further scrutiny. This has the practical effect of focusing investigative resources more efficiently and reducing unnecessary suspicion on uninvolved individuals.

Importantly, research shows that polygraph testing can assist in obtaining additional information. The structured nature of the testing process, including the pre-test interview and controlled questioning, often leads to disclosures, clarifications or admissions that

may not emerge through standard questioning techniques alone. In this sense, the polygraph functions not only as a measurement tool but also as a structured interview process.

Polygraph testing further contributes to excluding innocent individuals. This is a critical function in both criminal and workplace investigations. By supporting credible denials, it helps prevent wrongful conclusions and strengthens the overall fairness of the investigative process.

In workplace environments, particularly in sectors such as security, retail and logistics, polygraph testing is used to address issues such as stock losses, fraud, and breaches of trust. It assists employers in assessing integrity, identifying patterns of dishonesty, and supporting broader investigative findings.

The consistent theme across both research and practice is that the value of polygraph testing lies not in conclusively, but in helping to find, test and strengthen evidence. When used correctly, it enhances the quality, efficiency, and fairness of investigations, making it a practical and legitimate tool within both investigative and legal contexts.

Misconceptions and Misinformation

Several misconceptions continue to undermine the proper use of polygraph evidence.

The first is that polygraph evidence is inadmissible. This is incorrect. The Labour Court has clearly accepted its admissibility.

The second is that polygraphs have no value. This is also incorrect. The courts recognise their role in assessing credibility and supporting other evidence.

Another common misconception is that polygraph testing measures nervousness. Scientific research shows that it measures patterns of physiological responses linked to stimulus significance, not general anxiety.

There is also a belief that individuals can easily manipulate or defeat the test. While no method is immune to error, there is no reliable evidence that individuals can consistently control the physiological responses measured during testing.

These misconceptions often arise from misunderstanding both the law and the science.

Risks of Misuse

The main risk associated with polygraph evidence is over-reliance.

Courts have made it clear that polygraph results cannot be used as the sole basis for dismissal. Doing so will render the decision unfair.

Another risk is improper administration or interpretation. The reliability of polygraph evidence depends on the skill and methodology of the examiner.

These risks do not justify exclusion. They require proper use.

Conclusion

South African labour law adopts a balanced and rational approach to polygraph evidence. It is admissible and may be used before the CCMA and the Labour Court, where it is recognised as valid, corroborative evidence that can assist in assessing credibility and determining probabilities. Recent case law from 2021 to 2025 demonstrates a consistent judicial approach in this regard. The courts have not rejected polygraph evidence, but have repeatedly engaged with it, regulated its use, and clarified its evidentiary role. The issue is not admissibility, but proper application within a broader evidentiary framework.

The claim that polygraph evidence cannot be used is therefore not supported by law. The correct position is that it can be used, should be used, and is most effective when applied properly and in conjunction with other evidence. Scientific research supports this approach. Polygraph testing is based on established physiological principles and has been shown to perform at levels comparable to other accepted forensic methods.

Like all evidence, it has limitations. However, those limitations do not negate its value; they define its role. Polygraph evidence should not be excluded from consideration. In determining disputes on a balance of probabilities, all relevant evidence must be evaluated. When properly applied, polygraph evidence constitutes a legitimate and useful component of the overall evidentiary assessment.

By Hercú Turner – NextGen Workforce Solutions (Pty) Ltd
06/04/2026

Reference List

Legislation

Labour Relations Act 66 of 1995 (South Africa)

Case Law

Truworths Ltd v CCMA & Others

Mustek Ltd v Tsabadi NO & Others

Food & Allied Workers Union obo Kapesi & Others v Premier Foods Ltd t/a Blue Ribbon Salt River

Sedibeng District Municipality v SA Local Government Bargaining Council

SA Transport & Allied Workers Union & others v Khulani Fidelity Security Services (Pty) Ltd

GIWUSA obo Malemone and Others v Mashaba N.O and Others

Rolfes Chemicals (Pty) Ltd v Moni N.O and Others

Poggenpoel and Another v Commission for Conciliation, Mediation and Arbitration and Others

Scientific and Academic Sources

Widacki, J. & Horvath, F. (1978).
An Experimental Investigation of the Relative Validity and Utility of the Polygraph Technique and Three Other Common Methods of Criminal Identification.
Journal of Forensic Sciences, 23, 596–600.

Honts, C.R. (1990s–2000s).
Various studies on polygraph validity and psychophysiological detection of deception.

American Polygraph Association (1990s–present).
Validation studies, model policies, and meta-analytical research on polygraph testing.

A Respiration Primer for Polygraph Examiners (2009).
Polygraph Journal / American Polygraph Association.

Etemi, N. & Halili, M.
The Polygraph as an Investigative Tool in Criminal Investigations.

Additional Notes

- Case law can be accessed via SAFLII (www.saflii.org)
- Some recent cases (2024–2025) may also be available via legal databases such as Juta, LexisNexis or JibuDocs