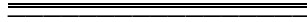
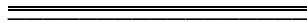


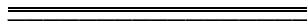
**The Bill Blackwood
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Use of the Polygraph to Screen Police Candidates



**A Leadership White Paper
Submitted in Partial Fulfillment
Required for Graduation from the
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ABSTRACT

Police departments have an obligation to protect the citizens of their community and the reputation of their agency. An important administrative function that supports that obligation is the hiring process. The police department must fill open positions in order to fulfill its public safety roll, while ensuring that inappropriate candidates are screened out.

Some police departments use the polygraph test as a screening device. The Employee Polygraph Protection Act of 1988 prohibits employers from using the polygraph test as a pre-employment screening tool (<https://www.dol.gov/whd/polygraph/>). Police departments are exempt from this law. The Texas Commission on Law Enforcement requires that a background investigation be conducted on candidates but does not require that a polygraph test be administered. Polygraph test results can only be introduced as evidence in court under limited circumstances.

While the polygraph test has proven to be an effective law enforcement investigative tool, it is not infallible. The polygraph test results can be intentionally or inadvertently manipulated. Errors, especially a bias toward false positive determinations, can have a negative impact upon the police department and the candidate. Police departments should not use the result of a pre-employment polygraph test as the sole basis of a negative hiring decision.

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INTRODUCTION

Law enforcement is a noble profession in the United States. Every police officer takes an oath to protect and serve their community while upholding and defending the laws and the Constitution of the United States. People invite police officers into their most sacred places, their homes. They share the most intimate aspects of their lives with police officers. In the vast majority of cases, they have never met the officer. They do not know anything about the officer. All they do know is that the officer is a representative of their police department. They must have faith that the police department will always act in their best interests (Schroeder, 2018).

This reliance on the reputation of the police department invokes a huge responsibility on the chief executive. The chief of police must effectively staff a police department capable of accomplishing the agency's goals. At the same time, the chief must ensure that those officers are worthy of upholding and protecting the reputation of the department.

One important process that can impact the reputation of a police department is the hiring of police officers, which must fill available positions with suitable candidates. Typical pre-employment screening involves applicants undergoing written and physical tests, medical and psychological evaluations, and a thorough background investigation. The background investigation often includes a polygraph test. An article in Public Personnel Management stated, "Polygraph testing in the selection process is used to assess the honesty and integrity of job candidates, with the aim of minimizing employee theft and other negative workplace behaviors" (Terpstra, Kethley, Foley & Limpaphayom, 2000, p.46).

The polygraph test is one of the most controversial tests in the hiring process (Walczyk, Schwartz, Clifton, Adams, Wei & Zha, 2005). An option available to police departments is to screen all applicants with a pre-employment polygraph test, which the applicant must pass in order to be considered for employment. The temptation to do so is understandable given the pressure created by the responsibility to hire suitable candidates. According to Dr. Richard White (2001), "A study of 626 local police departments found 62% have an active polygraph screening program" (p.484). However, polygraph pre-employment screening of applicants is not completely accurate. Despite this, there exists a strong belief that the polygraph test is infallible. False positives exclude otherwise suitable candidates, while false negatives include candidates who should be excluded. Police agencies should not use the results of polygraph evaluation as the sole basis for a negative employment decision during the hiring process.

The polygraph test was not the first test developed to determine whether or not a person was being truthful (Vicianova, 2015). An ancient Chinese test involved filling the suspect's mouth with rice. If the rice was dry when removed, the suspect was believed to be deceptive because it was thought that a guilty person would not be able to produce saliva (Vicianova, 2015). During medieval times an ordeal, or trial, was used to determine the truth. It was believed that God would not allow an innocent person to be harmed. An example of an ordeal would be to force the suspect to retrieve an object from a pot of boiling water (Vicianova, 2015). The original polygraph was invented by John Larson and Leonarde Keele (Lewis & Cuppari, 2009).

Basic knowledge of how the polygraph test works is important to understanding the controversy surrounding it, and why the results should not be used as the sole basis of a negative employment decision. The polygraph instrument receives inputs from the examinee's pulse, blood pressure, respiration and galvanic skin resistance. Respiration is measured by pneumograph tubes strapped around the examinee's chest and stomach. The examinee's blood pressure is measured by applying a standard blood pressure cuff to their arm. Galvanic skin resistance, which is electrical resistance in the skin is measured by electrodes placed upon the examinee's fingers. These inputs are recorded on charts during the test to be evaluated by the examiner (Carney, 1991).

Before the polygraph is administered, the examiner has an interview with the examinee (Ben-Shakhar, 2008). The polygraph examiner must establish that the examinee's participation is voluntary. The examiner gets background and personal information from the examinee. The questions that will be asked during the polygraph test are developed and discussed with the examinee (Ben-Shakhar, 2008).

There are two or three types of questions, depending upon the specific approach being taken: relevant, irrelevant and possibly comparison. Relevant questions relate directly to the topic being examined. Irrelevant questions have nothing to do with the topic and which the examinee is likely to answer truthfully. Comparison questions relate to the topic being examined, but are designed to get a response from an innocent examinee. All the questions are styled to have "yes" or "no" responses (Ben-Shakhar, 2008).

During the polygraph test, the examiner asks the questions developed during the pre-polygraph interview. The examinee responds as their blood pressure, respiratory

and galvanic information is collected by the polygraph instrument and recorded on graphs. When the polygraph test is complete, the examiner evaluates the charts and determines one of three possible outcomes: deception indicated, no deception indicated, or inconclusive (Handler, Honts, Krapohl, Nelson & Griffin, 2009). An outcome of deception indicated means the examiner determined the examinee was untruthful answering one or more of the questions. A no deception indicated determination means the examiner believes the examinee was truthful. A determination of inconclusive means that not enough information was available to make a deception indicated or no deception indicated determination (Handler, Honts, Krapohl, Nelson & Griffin, 2009).

Contrary to what most people believe about them, polygraph tests do not detect lies. The polygraph records physiological changes associated with the examinee's responses to the questions asked. The examiner interprets these physiological responses to render a determination (Lewis & Cuppari, 2009). In order to make that determination, assumptions must be accepted. First that the measured physiological changes are involuntary responses to stress (Sternbach, Gustafson & Colier, 2009). Second that the stress precipitating the physiological response was related to lying or deception (Sternbach, Gustafson & Colier, 2009).

The Employee Polygraph Protection Act (EPPA) of 1988 protects job seekers from being required to take a pre-employment polygraph test and regulates the use of polygraph tests in most circumstances (Department of Labor, n.d.). The Employee Polygraph Protection Act also mandates that polygraph test results be kept strictly confidential. Employers can be fined up to about \$21,000 per incident. This legislation

excludes local governments, so police departments can lawfully use the polygraph test as a pre-employment screening tool (Department of Labor, n.d.). Before licensing, the Texas Commission on Law Enforcement (TCOLE) requires police candidates to have had a background investigation completed. Medical and Psychological screenings are also required. TCOLE does not mandate that police departments require candidates to submit to a polygraph test (TCOLE, n.d.).

POSITION

There exists a strong belief that the polygraph test is infallible. Schmidt (1997) stated, "There is a tendency on the part of the investigator or local police officer to substitute the polygraph for an adequate investigation" (p.9). The results of a polygraph test can be manipulated (White, 2001). Polygraph screening results can contain false positive and false negative determinations, and there is bias toward false positive determinations. Police agencies should not use the results of polygraph evaluations as the sole basis for a negative employment decision during the hiring process.

Polygraph tests are not infallible. They do, however, have a proven history as an effective law enforcement investigative tool. Warner stated, "... in 2002 three men confessed to murders following their polygraph tests" (Warner, 2005, p.11). Patrick and Lacono (1989), in a study of prison inmates, found that 87% of guilty subjects were correctly identified after a blind review of polygraph charts (p. 350). Automation of the polygraph results can improve accuracy. An experiment designed to compare the accuracy of human examiners to automated polygraphs found that, "Overall 77.5% of the participants in the automated condition were correctly identified, while only 65% of

the participants in the human examiner condition were classified accurately” (Honts & Amato, 2007, p.195).

This effectiveness of polygraph testing in criminal investigations has led to the strong belief that polygraph tests are infallible (Kleinmuntz, 1982). Warner stated, “This theory has proven successful because any technique that examinee’s believe to be a valid test for deception likely can produce deterrence and admission” (Warner, 2005, p. 12). Polygraph examiners intentionally develop the idea that the polygraph test is completely reliable in detecting deception to help obtain confessions (Sternback et al., 2009). As the 1982 case of The Greenway Killer, where an innocent man who failed a polygraph test remained the primary suspect as murders continued, illustrates that polygraph tests are not completely reliable (Lewis & Cuppari, 2009).

The belief that the polygraph test is infallible can create a negative bias toward an applicant. Candidates for a police position are routinely asked whether they have previously applied for a similar position elsewhere. If the candidate has applied elsewhere, the next logical question would be to ask the outcome of that application. If the candidate then discloses that they failed a polygraph, there would be a natural tendency for the background investigator, or polygraph examiner, to believe the candidate had been untruthful to the previous agency. This would not necessarily be the case but could lead to the candidate being rejected from consideration.

The results of a polygraph test can be manipulated. The Department of Justice has taken the position that manipulation of a polygraph test is possible. In one case, “A former law enforcement officer and owner of “Polygraph.com” pleaded guilty today of obstruction of justice and mail fraud for training customers to lie and conceal crimes

during polygraph examinations” (DOJ, 2015, p.1). The accuracy of a polygraph test can be affected by increasing the physiological responses. This could be accomplished physically, by inflicting pain, or mentally, by performing a mental task (White, 2001). According to Ben-Shakhar (2008), “A number of experiments have indicated that it is possible, indeed quite easy, to train guilty examinees and prepare them for a polygraph examination (either CQT or GKT) in such a way that with a high probability they will be found truthful” (p.199).

The examiner can introduce bias into the evaluation. The same examiner that conducts the pretest interview and develops the questions is the same examiner that asks the questions during the polygraph test. Asking the questions with a different tone or inflection could conceivably cause a different reaction to be recorded from the examinee (Ben-Shakhar, 2008). Lewis and Cuppari (2009) stated, “Excess motivation and ego can combine to thwart many interviewers’ best intentions. Feelings of superiority and looking down on the person being interviewed are not conducive to getting accurate results” (p. 91). Additionally, the ambient temperature at which the polygraph test is given can impact the electrodermal and cardiovascular measurements (Macneill & Bradley, 2015)

The polygraph is susceptible to two types of errors. A false negative polygraph test result occurs when the examiner fails to detect that a candidate is being deceptive (White, 2001). A false positive polygraph test result occurs when the examiner determines the candidate was deceptive during the polygraph test when in reality, no such deception existed (White, 2001). Both errors have consequences for law enforcement agencies that require candidates to pass a polygraph test. A false positive

will exclude an otherwise suitable candidate, through no fault of their own. In this case of a false negative, a deceptive candidate will continue through the hiring process.

Compounding this issue, polygraph tests have a demonstrated bias, increasing the number of false positives. During one field study a polygraph examiner correctly determined 98% of the guilty suspects; however, 55% of the innocent suspects were determined to be guilty also (Lykken, 1984). The point of a pre-employment screening test is to identify unsuitable candidates. A false negative on a screening test means that a candidate advanced in the process who should have been eliminated. Pre-employment screening tests should, therefore, be set up in a way to reduce the number of false negatives as much as possible. This means suitable candidates will be rejected as false positives (Handler et al., 2009). Examinees who receive a false positive determination from a polygraph test have to wait for the investigator to uncover exculpatory evidence (Fiedler, Schmid & Stahl, 2002). This would be unlikely in a pre-employment process where the examinee has been excluded from consideration. Terpstra, Kethley, Foley, and Limpaphayom (2000) indicated that, "Polygraph testing is very invasive, however, and there is a greater social stigma attached to being rejected for employment on the basis of dishonesty than there is for being rejected on the basis of insufficient knowledge or ability" (p.46)

Due to false positives and false negatives, police agencies that require candidates to take and pass a pre-employment polygraph test are effectively no better off for doing so. The opportunity to hire suitable candidates was lost while vigorous systems are still required to address employee misconduct.

COUNTER ARGUMENTS

Proponents of using the results of a polygraph test as the sole basis of a negative employment decision may argue that the police have a duty to protect their community and the reputation of their department from unsuitable candidates. This argument is not completely baseless. The polygraph test has a demonstrated history of success as an investigative tool for law enforcement. However, the polygraph test falls short of 100% accuracy (Patrick & Lacono, 1989).

The polygraph test does not detect lies. They measure physiological changes in response to questions (White, 2001). The examiner evaluates changes in physiological responses that are recorded by the polygraph and makes a determination about the examinee's truthfulness (Carney, 1991). False positive determinations and false negative determinations are possible results of a polygraph examination (White, 2001). These determinations have potentially negative consequences for both the department and the candidate. The results of a polygraph test could be manipulated (Ben-Shakhar, 2008).

The polygraph test is generally accurate, but the decision whether or not to offer employment to an individual is an inherently personal one. Since the polygraph test is not an infallible method to determine between truth or deception, police departments should not use the polygraph test as the sole basis for a negative hiring decision.

Proponents of using the results of a polygraph test as the sole basis of a negative employment decision may also argue that it is lawful for police departments to do so. It is true that the Employee Polygraph Protection Act of 1988 exempts local

government. It is lawful for police departments to lawfully use the polygraph in this manner (Kanable, 2010).

Having acknowledged the legality of the practice, Congress passed the Employee Polygraph Protection Act of 1988 to protect job seekers from the perceived shortcomings of the polygraph test (Department of Labor, n.d.). The Texas Commission on Law Enforcement requires that police applicants undergo a background investigation, but does not require that a polygraph test be administered (<https://www.tcole.texas.gov/content/career-texas-law-enforcement>). Polygraph test results are only admissible as evidence in court under limited circumstances, such as, a prior stipulation of both the prosecution and the defense (Myers, Latter, & Abdollahi-Arena, 2006). These limitations clearly indicate that it is not appropriate to base negative hiring decisions solely on the results of a polygraph test.

RECOMMENDATION

Police agencies should not use the results of polygraph evaluation as the sole basis for a negative employment decision during the hiring process. The polygraph test is not infallible. The results of a polygraph test can be intentionally or inadvertently manipulated. Errors, especially the bias to report false positives, have potentially serious negative ramifications for the police department and the candidate. The fact that police departments can legally base hiring decisions solely on the results of a polygraph test, does not mean that departments should do so. Legislative and judicial branches of government have displayed misgivings about pre-employment polygraph tests by significantly curtailing their use.

This does not mean polygraph screening should be divorced from the hiring process. The polygraph test has demonstrated a significant history of effectiveness as a law enforcement investigative tool. The polygraph test can be a useful option to support the hiring decision.

The foundation of the hiring process should be a thoroughly conducted background investigation. It should be understood that all candidates are subject to a polygraph test to be considered for employment. The polygraph test should only be utilized to answer questions or resolve inconsistencies that arise about a candidate during their background investigation. Police department policies should specify the circumstances in which a candidate would be referred for a polygraph test.

Using the polygraph test as a support tool for the hiring process rather than as the sole basis for a negative hiring decision will fulfill the department's obligation to thoroughly screen police candidates. The department could hire suitable candidates while excluding candidates appropriately. The dignity of the candidate would be protected. The interests of the community would also be protected. Citizens could continue to count upon the reputation of their police department.

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