

The Use of Polygraphs to Screen Potential Employees

Robert J. Johnson
Patricia M. Shields

Each year, retail employees steal an estimated \$5 billion to \$10 billion in merchandise from employers.¹ Many businesses are using the preemployment polygraph test as a preventive measure to protect themselves from such losses. Opponents of the test, however, raise serious moral and ethical questions about its use. They argue that the test violates an individual's rights by invading privacy and requiring self-incrimination. In addition, they challenge the test's reliability and validity.²

Commercial Use of the Polygraph

The commercial use of the polygraph is widespread throughout the United States. Employers who use its results view the information as valuable in assessing a potential employee. The preemployment polygraph can be a cross-check on direct or indirect information that a prospective employee may have given an employer. (For example, the reason for leaving the last job may be verified.) Analyzing the information aids employers in making decisions about employees. A typical job applicant screening consists of both a personal pretest interview (in which background, medical history, and current physical condition are discussed) and the polygraph test itself. The polygraph test is used to confirm data collected in the pretest interview and to explore such areas as police records, driving records, and alcohol and drug use and such security matters as shoplifting and any previous theft of merchandise or money from an employer. Polygraph tests are voluntary and cannot be administered without the permission of the prospective employee.

Robert J. Johnson is a self-employed polygraph examiner in San Antonio. Patricia M. Shields is Assistant Professor of Political Science, Southwest Texas State University.

Those favoring the business use of the polygraph see it as beneficial to both the employer and the employee. Potential benefits to the firm include an inexpensive and accurate verification of a job applicant's employment history; detection of such people as job hoppers, chronic alcoholics, and thieves; reduction in employee turnover; and reduction in the inventory and cash shortages associated with employee theft. Benefits to the employee of the polygraph test have been identified as rectifying an unfair evaluation by a previous employer, reducing the waiting time caused by checking application statements by telephone or letter, and reducing the hazards to an honest employee of working with a dishonest employee.

Opponents of the business use of the polygraph point out that the instrument cannot record a lie or even the physiological conditions surrounding a deceptive response; rather, it measures certain physiological changes generated by emotional stress. The stress itself may be caused by emotions unrelated to lying, such as anger or fear. Hence, innocent persons may be falsely accused while guilty persons may go undetected or beat the test. The reliability of the test is also questioned because two sets of results cannot be accurately compared. Furthermore, such factors as the condition of the test room, the physical and emo-

Table 1

Age Distribution of Preemployment
Polygraph Subjects

Age	Percentage
16-18	11.3
19-24	42.6
25-34	32.3
35-49	10.6
50 and over	3.0

tional state of the subject, and the mannerisms and voice inflection of the examiner cannot be controlled.

The major ethical issues surrounding the use of the polygraph involve self-incrimination and invasion of privacy. During the pretest section of the polygraph, applicants may discuss information not relevant to being hired and incriminate themselves by confessing past actions. Critics of the polygraph also maintain that pressure to take the exam (if taking the exam is a condition of employment) invalidates the voluntary nature of the test and that this undue intrusion into the lives of applicants amounts to an invasion of privacy.

The Polygraph Law in Texas

Although the federal government has no legislation dealing with the use of lie detector tests by businesses, twenty-three states have laws that provide the public with some protection. State laws usually regulate persons who administer polygraph tests. Before 1965, anyone in Texas could set up a polygraph business merely by purchasing a polygraph. No special skill, education, or training was required, but in 1965 the Texas Polygraph Examiners Act created the six-member Board of Polygraph Examiners to regulate polygraph examiners and protect the public from incompetents.

Before the legislation was passed, many operators had determined truth or deception by recording a subject's respiration, blood pressure, or heart rate during the polygraph test. The act, however, set minimum instrumentation standards and mandated that any instrument used for

verifying truth must record cardiovascular and respiratory patterns visually, permanently, and simultaneously. Instruments on the market today not only include the basic legal requirements but also measure galvanic skin responses and usually two components of the subject's respiratory patterns.

The use of the polygraph for screening in Texas will be affected by the state legislature's review of the polygraph board under the Sunset Act. A staff report to the Sunset Advisory Commission indicates that the board has met with mixed success.³ Improper management of funds and failure to maintain proper security and clear guidelines regarding experience have resulted in inconsistent application of

The major ethical issues surrounding the use of the polygraph involve self-incrimination and invasion of privacy.

licensure requirements. The staff report, however, reaffirmed the need to continue regulating polygraph examiners. Given the extensive use of the polygraph by law enforcement officials and employers, the need to protect the public from incompetent examiners still exists. The staff report suggested that the legislature choose among three approaches: modifying the existing board, transferring the regulating function to the Department of Public Safety, or prohibiting the use of polygraph testing for a person to obtain or hold a job. If the legislature adopts the last option, only law enforcement officials would be able to use the polygraph.

A Study of Texas Polygraph Subjects

What kinds of people are given polygraph examinations and what kind of information does the polygraph provide

Table 2

Racial and Ethnic Distribution of Subjects
and of Labor Force in San Antonio SMSA
(Percentage)

Race	Subjects	San Antonio SMSA
Blacks	10	7
Hispanics	44	41
Whites	45	51
Other	1	1

Source: San Antonio population information from the U.S. Department of Commerce, Bureau of the Census, *Census of Population, 1970: Characteristics of the Population: Texas* (Washington, D.C.: Government Printing Office, 1973).

Table 3

Racial Distribution of Subjects by Education Level*
(Percentage)

Years of high school completed	Whites	Blacks	Hispanics	Total
0-11	23	48	42	33
12	37	26	37	36
13 or more	40	26	21	31

*People of other races were not included in this table because there were only two sample cases.

Table 4

Industrial Distribution of Subjects
and of Labor Force in San Antonio SMSA
(Percentage)

Major industrial division	Subjects	San Antonio SMSA*
Construction	6	9
Manufacturing	13	16
Transportation	3	4
Wholesale and retail trade	62	34
Finance	3	9
Service	13	27

*This percentage does not include the education or public sectors.

employers? To answer these questions, we have analyzed data that were collected in the San Antonio standard metropolitan statistical area (SMSA) from the files of a private industrial security firm. Of the 5,831 examinations administered by this firm in 1979, a systematically chosen sample of 300 was used. The anonymity of all those in the sample was protected.

Almost three times as many men as women were given the polygraph exam (74 percent were men). Furthermore, 43 percent of the applicants were between the ages of 19 and 24; only 14 percent of the applicants were over 35 (see table 1). The racial and ethnic distribution of those taking the test is fairly similar to the distribution in the labor force of San Antonio (see table 2). Blacks, however, seem to be slightly overrepresented among applicants and whites somewhat underrepresented. Of those taking the test, 37 percent had graduated from high school and approximately 31 percent had been exposed to college. The level of educational achievement was highest among whites. Almost half of the blacks, 42 percent of the Hispanics, and 23 percent of the whites had failed to complete high school. Minority applicants were also less likely to have had any college experience.

Those taking the test were most likely to be applying for jobs in the wholesale and retail industries (62 percent). Roughly a third of the labor force in the San Antonio SMSA works in this industry (see table 4). The wholesale and retail trade sectors, of course, are particularly vulnerable to employee theft.

Proponents of preemployment polygraph exams claim that obtaining reliable employee references is difficult and costly. References from previous employers are an obvious alternative to use of the polygraph, but polygraph subjects appear to have less-than-stable job histories. Over half the applicants had job tenures of six months or less with their previous employers; only 10 percent had worked for their previous employers more than five years.

Table 5

Tenure at Last Job of Test Subjects

Length of employment at last job	Percentage
Never employed	2
0-6 months	51
7 months to 1 year	15
1-3 years	17
3-5 years	6
Over 5 years	10

Table 6

Undesirable Subject Characteristics

Category	Percentage
Job dismissal	41
Police record	29
Shoplifting	45
Merchandise theft	62
Money theft	27

Polygraph test results may also reveal such undesirable characteristics as a history of shoplifting or employee theft. Fears of employee pilferage are not unwarranted; 62 percent of the subjects had been involved in such theft (either by their own admission or through the examiner's evaluation).⁴ About 41 percent of the subjects had shoplifted, 45 percent had been dismissed from a previous job, 27 percent had stolen money from a previous employer, and 29 percent had a police record.

Conclusion

The data show that job applicants who take the polygraph test are drawn from a broad spectrum of society. The typical polygraph subject, however, appears to be a young man with a high school education who had been with his previous employer less than six months. In addition, the results revealed that a large percentage (sometimes as high as 60 percent) had been involved in illicit activities, such as merchandise theft and shoplifting.

Questions surrounding the validity of polygraph tests are not resolved. The examiner may misread results or the applicant may admit misconduct that did not occur. This research also says nothing about how employers use polygraph information. Are the test results used as screening devices to reject marginal job applicants? Do employers use the information to exclude individuals who seem to be serious risks? For example, does admission of past illegal activities, such as shoplifting, discredit the individual who has never been involved in stealing merchandise and money from an employer? Different employers probably use the results of the test differently; when approached, however, they were unwilling to discuss what use they actually made of the tests. Clearly, further research on this aspect of the business use of polygraph tests is needed.

Notes

1. Deborah Cromer Post, "Controlling Employee Pilferage," *Security World*, May 1980, p. 34.
2. For further discussion see John A. Belt and Peter B. Holden, "Polygraph Usage among Major U.S. Corporations," *Personnel Journal*, February 1978, pp. 80-86; Mary Ann Coghil and Elaine F. Gruenfeld, *The Lie Detector in Employment*, rev. ed. (Ithaca, N.Y.: New York State School of Industrial and Labor Relations at Cornell University, 1973); Paul Falick, "The Lie Detector and the Right to Privacy," *New York State Board Journal*, February 1968, pp. 102-10; Robert J. Ferguson, Jr., *The Polygraph in Private Industry* (Springfield, Ill.: Charles C. Thomas, 1966); Richard L. Putman, "Polygraph Screening of Police Applicants: Necessity or Abuse?" *Polygraph* 7 (December 1978): 257-62; Burke M. Smith, "The Polygraph," *Scientific American*, January 1967, pp. 25-31.
3. Legislative Budget Office, Program Evaluation, "Board of Polygraph Examiners: Staff Report to the Sunset Advisory Commission," Austin, Texas, 1979.
4. For the most part applicants freely admitted their behavior. For example, of the 188 applicants who were found to have stolen merchandise from a previous employer, 163 admitted the theft during the interview.