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The Polygraph and Psychiatrists

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ABSTRACT: The use of the polygraph as a supposed lie detector is reviewed, as well as some of the literature purporting to uphold claims of scientific reliability and validity for the technique. Interviews with individuals involved with polygraphic lie detection indicate that any effectiveness of the technique may be, in the main, due to the suggestibility of the examinees and the coercive mystique of the instrument. The 1988 Polygraph Protection Act may have placed some effective restrictions on what was formerly untrammeled and overtly abusive use of the polygraph in private industry. However, considerable potential for current and future abuse continues to exist. Psychiatrists and all mental health experts are especially warned about the ethical problems resulting therefrom.

KEYWORDS: psychiatry, ethics, lie detection, polygraph

> If one tells the truth, one is sure
> sooner or later, to be found out.
>
> OSCAR WILDE, "Phrases and Philosophies
> for the Young"

The polygraph has been making more news than ever in recent years. Increasing attention has been given to its role not only in law enforcement but in government as well. When the Reagan Administration, pressed by then-Secretary of Defense Weinberger and then-CIA Chief Casey, determined that polygraphy should be used routinely to test all federal employees in "sensitive positions," the Secretary of State balked and headlines were made.

Last year's congressional hearings also revealed polygraphy's burgeoning role in private industry, sometimes in stories which carry with them the seeds of considerable alarm combined with wonder. Earlier, a 1982 article noted that about half of the McDonald's outlets in the United States screened employment applicants via polygraph! [*1*][2]

According to Raskin in 1980, preemployment screening was also "heavily relied on by members of the National Association of Drug Stores and the National Association of Convenience Stores, by Brinks, Inc." and Associated Grocers [*2*].

The expanding dependence upon a machine to determine honesty among workers represents an obvious, sad commentary on today's society. Thievery in the workplace is rampant. The financial costs of white-collar crime are huge and place an enormous emotional and social burden on the entire population. According to an Associated Press (AP) article, employee thefts cost U.S. businesses an estimated $40 billion annually [*3*].

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[2]See also B. Kleinmuntz and J. J. Szuck, "Lie Detection in Ancient and Modern Times: A Call for Contemporary Scientific Study." *American Psychologist,* Vol. 39, No. 7, 1984, pp. 766–776.

Like everyone else, psychiatrists are adversely affected by the losses to U.S. business through theft and other crime. Employee honesty is therefore a concern to psychiatrists as well as to everyone else. Perhaps an even more pertinent *professional* concern, though, is the reliance that U.S. business (and government) has invested in a technology which impinges on the mental health sciences and which promises much more than it can really offer, especially in an area which might be harmful to patients.

Patients are citizens, too. They have also suffered from the drain of U.S. economic losses, but they may have been affected even more by the wave of testing which ensnared them as well as their neighbors. Not only applying for jobs but keeping them was often predicated upon taking the tests. Passing or failing the tests could have meant the difference between working and not working, even for an employee who may have given long and productive service to the company which then insisted on the new testing programs.

In my own consulting room during the past five or more years, I have listened to a number of individuals of all ages and of both sexes who have told me about being strapped to the polygraph and being asked questions about their honesty. Even though the State Legislature banned compulsory preemployment polygraph examinations in California long ago, "voluntary" testing was still encouraged by many firms. Such "voluntary" testing may still be carried out, even after the passage and signing of the 1988 Polygraph Protection Act. To their great relief, none of my patients being screened "voluntarily" for new or continued employment were asked questions about their sex lives, or about other personal aspects of their existences which have even less place in hiring or firing practices. However, I also interviewed a man who was, indeed, questioned about these matters *as part of an ostensible psychiatric examination* performed during a child custody suit [*4*]!

All of my patients with whom I discussed this practice were very upset at being subjected to the examination. Fortunately, none of them lost their jobs or were prevented from being hired because of the tests. Many stories from other sources, however, describe those outcomes. In 1986, the California Supreme Court ruled that involuntary polygraph examinations of *all* employees (including government and public employees) inherently intruded upon the employees' constitutionally protected zone of individual privacy and that use of the polygraph for public employees denied them equal protection of the law. In its opinion, the Supreme Court of California stated,

> If there is a quintessential zone of human privacy it is the mind. Our ability to exclude others from our mental processes is intrinsic to the human personality. In their seminal article on the right to privacy, Warren and Brandeis stated: 'The common law secures to each individual the right of determining, ordinarily, to what extent his thoughts, sentiments, and emotions shall be communicated to others.' . . . A polygraph examination is specifically designed to overcome this privacy by compelling examinations of 'thoughts, sentiments and emotions' which the examinee may have chosen not to communicate. The standard polygraph test is far more intrusive than a series of questions related directly to the employee's job performance or knowledge of the crimes under investigation. . . . Where polygraph testing is used as a preemployment screening device, 'fishing expeditions' and shockingly intrusive questions have been reported [*5*].

As the California Supreme Court described in its majority opinion, and as will be demonstrated further here, the polygraph is an instrument of coercion.

Among those testifying before the House Committee on Education and Labor regarding the then-proposed Polygraph Protection Bill was Dr. John F. Beary III, Associate Dean for Planning and Development at Georgetown University. Representing the American Medical Association (AMA) before the committee, he told them that there is no so-called "Pinocchio effect," which would expose a liar during polygraphic examinations. He made clear the AMA's stance against the use of polygraphic lie detection as a preemployment test in private industry or government agencies. He also noted that the AMA was calling for more research on the polygraph before it could be considered a valid test

of truth in the workplace. Noting the wide variance of accuracy of the polygraph in criminal evaluations, Dr. Beary argued that

> Its use as a condition of employment is even less credible. In fact, because questioning in the employment setting deals with more minor issues with the consequences of failure less serious than in a criminal case, it could be anticipated that the physiologic arousal of the subject might be less impressive and the deception of the examiner even easier [6].

The AP news article describing the House bill indicated that an estimated two million workers were tested each year by private companies [3]. There is an enormous polygraphy industry. Backers of the bill described the practice of private polygraphy as an invasion of workers' rights to privacy and also as a potential violation of guarantees against discrimination in hirings and promotions. According to the article,

> Matthew G. Martinez (D-Calif.), floor manager of the ban proposal, declared that, 'The polygraph is no more effective for discerning truth than a black voodoo box.' . . . Martinez said that even a polygraph error rate of 10 per cent would mean 200,000 to 300,000 Americans might be falsely accused and their jobs endangered each year [3].

The bill passed by the Congress and signed by the President in December 1988 had been modified in the Conference Committee by a Senate amendment permitting employers to administer carefully controlled tests as part of in-house theft investigations. Conditions for such tests include rigid criteria indicating that the employee had access to the stolen property, that the employer has a reasonable suspicion, and that he or she gave details of the incident as well as written evidence supporting the suspicions. This may end the so-called "fishing expeditions."

The 1988 Polygraph Protection Act also allows the testing of guards at sensitive installations such as airports and nuclear facilities, as well as drug company employees who might have access to controlled substances. It also exempted from the ban employees of federal, state, and local governments, as well as private contractors doing work for governmental bodies. The polygraphy industry will continue to have plenty of work.

The Senate and House exemptions demonstrate serious ambivalence on the part of the Congress regarding the use of polygraphic lie detection per se. If testing is permitted for such sensitive workers, is there not thereby some implication of Congress's faith in the technique? Even so, the House bill is not based on the premise that the lie detector is scientifically valid or even reliable. It is aimed solely at the prevention of abuse in private industry. But any use of polygraphic lie detection can be considered abusive if the idea is agreed upon that a scientifically invalid, but coercive procedure is being applied, with consummate risk to the subject. The House of Representatives in toto apparently does not perceive that risk as strongly as Representative Martinez.

Usually, polygraphic evidence is not accepted in court in the United States, although jurisdictions in 22 states can allow it in criminal trials if it has been stipulated in advance of the tests and agreed to by both prosecution and defense. According to Ekman, defense attorneys usually agree to that if the prosecutor will agree to drop the case if the subject passes the lie-detector examination [7]. On 15 Oct. 1987, the Supreme Court of Canada forbade the use of lie-detector evidence in Canadian courts. In the decision, one of the Justices noted, "The polygraph has no place in the judicial process where it is employed as a tool to determine or to test the credibility of witnesses. . . . [It would also] . . . disrupt proceedings, cause delays, and lead to numerous complications which will result in no greater degree of certainty in the process than that which already exists" [8]. Ekman quotes Richard K. Williams, Deputy U.S. Attorney General, who testified before the House of Representatives Committee on Government Operations (Subcommittee on Legislation and National Security) in 1983, "There has never been a [U.S.] Supreme Court ruling on the admissibility of polygraphic evidence in federal court" [7, p. 194].

In the federal government, the polygraph is currently, routinely used by the U.S. Army Criminal Investigation Command, U.S. Army Intelligence and Security Command, Naval Investigative Service, Air Force Office of Special Investigations, U.S. Marine Corps Criminal Investigation Division, National Security Agency, Secret Service, FBI, Postal Inspection Service, Bureau of Alcohol, Tobacco and Firearms, Drug Enforcement Administration, CIA, U.S. Marshals, Customs Service, and the Department of Labor [*7*]. The Fiscal Year 1986 Report to the Congress for the Department of Defense Polygraph Program indicates that a total of 24 939 lie-detector tests were given by that Department alone in 1985, of which 6505 were administered as part of the Counterintelligence-Scope Program and National Security Agency. The first six months of 1986 had already resulted in a total of 13 332 tests [*9*].

It should be emphasized here that the federal government, of which the Department of Defense is just a part, was only the third most frequent user of polygraph tests before the new law. It followed, in order, private business, and then the state and local law enforcement agencies which continue to use the process despite the difficulties inherent in using polygraphic evidence in court. They are, of course, unaffected by the 1988 law. The numbers are staggering. Ekman concludes that more than a million tests were probably given in 1983 [*7*], and Reardon refers to a figure of two million in 1986! [*10*]

Polygraphy and Scientific Validity

Reviewing the data purporting to demonstrate or disprove the possible scientific validity of the lie detector is the logical approach for any critical or laudatory investigator of the polygraph. However, that approach is not easy because of the heated disagreement between the foremost researchers in the field. Not only the data provided by one group are questioned by the others—even the overall research methodology is severely criticized by the others. In brief, there is really no repeatable, respected, agreed-upon data substantiating claims of reliability of the polygraph.

Leonard Saxe, visiting professor at Brandeis University and senior author of the 1983 report on polygraphy for the Congress's Office of Technology Assessment, wrote a celebratory newspaper article following the President's signing of the 1988 Polygraph Protection Act. He stated, "There is very poor evidence that polygraph tests can do any more than slightly better than chance in determining whether an individual is truthful or untruthful about specific allegations" [*11*].

Nonetheless, the scientific literature on polygraphy is fascinating. Most of it is in psychological rather than psychiatric journals, and a number of articles may also be found in law journals and reviews. Some psychiatrists have written about the polygraph as a research tool in areas other than detection of truth, for example as a gage to distinguish organic from dissociative amnesia [*12*]. Only a few others have written about its use as a lie detector, mainly as very skeptical observers [*13*].

Among psychologist-researchers, Lykken insists, "It is clear that polygraphic interrogation is an area of applied psychology because the lie detector clearly is a psychological test. If persons who administer and evaluate Stanford-Binets or Rorschachs or MMPIs are psychometrists, then the polygrapher is a psychometrist also" [*14*]. Review of much of the psychological literature on polygraphy reveals a field which is not only fragmented but even polarized in terms of opinion and about techniques to be used. Moreover, it is rife with personal invective of the type not usually seen in most scientific literatures. Comments by one researcher about the veracity of another researcher are as rarely seen in other aspects of scientific literature as they are plentiful here.

Ekman, Raskin, and Lykken are three of the most prolific and influential of the psychologist-researchers on polygraphy. Of the three, Raskin most strongly argues that the use of polygraphs as lie detectors has strong and replicable scientific validity [*15*].

Raskin is a proponent of what is called the control question technique, a method of questioning which Lykken disputes as quite likely invalid [*15*]. In turn, Lykken proposes the guilty knowledge test, a different technique. He states that the suspect must believe that the lie detector is infallible if the control question technique is to work [*16*]. Ekman agrees with Lykken [*7*, p. 201], but, in response, Raskin states, "In spite of 5 years of contact with the literature and with concepts of control question tests (see Raskin, 1978), Lykken still does not understand the simple, basic theory" [*17*]. And so it goes, with highly charged statements, defensive responses, and even some venom from all sides.

There is also considerable disagreement about the research performed to test the polygraph's validity. Numerous analog studies have been conducted, but, as Ekman points out, "People actually suspected of crimes are given a polygraph test not for research purposes but as part of the investigation of a crime" [*7*, p. 209]. Moreover, he states, "Detection apprehension should be greater when the stakes involve avoiding punishment, not just earning a reward . . ." [*7*, p. 60]. In the case of an individual whose life, family, and career are on the line because of a criminal accusation, the stress levels become alarming. The autonomic responses must be enormously adversely affected. The situation is considerably different when a research subject is asked questions, even in a test designed to be as realistic as possible.

Ekman criticizes much of the analog testing performed by Raskin and many others trying to validate polygraphic lie detection. He defines an experimental problem, asking, "How do you make people afraid and angry, and not both at the same time?" Continuing, he notes, "Sitting there hooked up, having scientists scrutinize what is going on inside their body, and often having cameras record any visible changes, embarrasses most people. Embarrassment is an emotion, and if it produces autonomic nervous system (ANS) activity, those ANS changes will be smeared across every emotion sample the scientist is trying to obtain. He may think the subject is remembering a fearful event at one moment, and an angry memory at another point, but what actually may happen is embarrassment during both memories. No scientist took steps to reduce embarrassment, none checked to be certain that embarrassment did not spoil their pure emotion samples" [*7*, p. 117].

The polygraph does nothing, of course, but measure a series of autonomic responses generated by the individual's responses to test questions. It measures autonomic arousal, physiologic changes generated by emotional stimulation, especially anxiety. That anxiety might be triggered by embarrassment, by guilt feelings about the situation investigated, by fear of being disbelieved (as in the Othello/Desdemona Error—see the following), or by many other concerns. Those changes are then interpreted by the examiner.

Raskin insists that research has indicated that the test procedures are able to penetrate the faking of sociopaths, to overcome obviously fallacious but strongly held delusional beliefs in psychotics, and to overcome other attempts to fool the machine such as by taking medication or by inducing pain to mask other responses. All in all, Raskin argues, the field studies are exemplary for the most part [*14*]. But questions remain, and not only in the minds of skeptical scientists [*3*,*10*]. William Safire, the nationally syndicated columnist, has written that the late William Casey took a lie detector test every month, "To set an example. He used to laugh at such tests because he knew he could beat them. . . . (Oversighters and inspectors general might like to see the records of the old Casey tests now, to see how ineffective and misleading the CIA polygraph was)" [*18*].

Polygraphers and their advocates seem to believe that human emotional responses are linear in the same way that the physiologic responses charted by the polygraph are linear. That is, on the charts, an anxiety-provoking question might produce an anxious response. However, that anxiety might not be due to the reason presumed by the examiner, representing a definitely nonlinear response. For example, Ekman proposes what he refers to as the Othello error (it should be called the Desdemona error if the emphasis is on

the subject being tested, not the person making the accusation), the situation in which an individual becomes so upset at having been accused that he or she responds as if the accusation per se were true. He states, in the example he uses of Terence Rattigan's play, *The Winslow Boy*, "It is next to impossible to distinguish the innocent boy's *fear of being disbelieved* [Ekman's emphasis] from the guilty boy's detection apprehension. The signs of fear would be the same" [7, p. 51].

Freud, himself, provided a warning which is often ignored, when he stated, "You may be led astray in your examination by a neurotic who reacts as though he were guilty, even though he is innocent—because a lurking sense of guilt already existing within him assimilates the accusation made against him on this particular occasion" [*19*].

Skolnick provides a related example:

> A person who is being given a lie detector test . . . is probably more nervous than a detached skeptic. . . . Assume, for example, an innocent suspect with a prior criminal record who is being questioned at police headquarters about the murder of John Jones. Frightened, he may respond with racing blood-pressure and contracted respiration. The theory holds that he should be equally frightened when questioned about a murder which never took place—when asked, 'Did you shoot Sam Smart in San Diego on Saturday night two weeks ago?' But the validity of this assumption is doubtful. The suspect may have known Jones, or have had some connection with him, or at least may have known of his murder. On the other hand, he may never have heard of Smart. Or he may be perfectly at ease about Smart's murder, knowing that at least a score of witnesses will testify that on Saturday night two weeks ago he was tending bar at the El Charro Club [*20*].

Not much criticism in the scientific or legal literature about polygraphic lie detection is based upon the technique's inability to distinguish objectively verifiable truth from that perceived and sincerely felt by the subject as truth, even though it cannot be objectively verified [*4*]. Many researchers are critical of the field studies, though, which attempt to determine the accuracy of polygraphic results in real-life evaluations as differentiated from the analog situations which use students and other experimental subjects. The major source of those criticisms, again according to Ekman, is "the ambiguity about ground truth," that is, the distinction between what is said by the subject, as differentiated from objectively verifiable truth [7, p. 208].

In its definition of truth, the *Random House Dictionary* includes an example, stating, "Truth (*often cap.*), ideal or fundamental reality apart from and transcending perceived experience . . ." [*21*]. What is firmly believed by the subject, even if it is not objectively verifiable, or even if it can be objectively disproved, transcends perceived experience. As the familiar bumper sticker states, "God said it, I believe it, and that's that!" Belief is powerful; repression and denial are also enormously strong defenses. One can only wonder, and doubt, if the use of the polygraph as a lie detector can breach them, as well as possibly breaching the truth which "transcends perceived experience."

The recent increase of accusations of sexual molestation within the framework of child custody and visitation contests has provided several examples of the polygraph's inability to differentiate between demonstrable truth and undemonstrable but nonetheless sincerely believed truth which "transcends perceived experience." Although not to the level of a frank, overt delusion, the accuser may well believe that the accused did, indeed, molest his or her child, and testing the accuser's strongly held belief will indicate only that the accuser strongly believes it. On the other hand, if the accused may actually have molested the child but must deny it to himself or herself because of his or her own psychodynamics, the tests will indicate only the denial without any supposed lying indications because the accused believes his or her own denial. In no way does the testing validate the accuracy of the beliefs. Polygraph tests simply determine belief, not fact.

All of the scientific experts in the field of polygraphy and lie detection agree, however, on the premise that many of the individuals who operate as independent examiners are poorly trained, and that the results of tests given by poorly trained examiners generally

are invalid [*13,14*]. Moreover, the testers who have been trained by one school, for example, to use the control question test, are subject to criticism by the proponents of the guilty knowledge technique, or of the relevant-irrelevant technique, or of any other technique. An even greater problem, though, is that many private examiners are hardly trained at all, and the techniques they employ are not related to any of these scrutinized, if debated and debatable techniques but are highly individualized, maybe even sui generis. This, of course, represents a considerable danger to the populace because the validity and reliability of these approaches is probably much less than of the better and more generally accepted studies of investigational techniques which may also be far less controversial. Nonetheless, lives and careers are based upon these examinations often performed by people whose professionalism may well be based solely upon their having read a book or by their having taken a weekend course.

Usefulness versus Scientific Validity

Whereas the myth of infallibility of the polygraphic lie detector can be objectively and profoundly questioned and doubted despite the proselytizing efforts of some psychologists and law-enforcement agencies, the actual *usefulness* of the instrument cannot be doubted at all. It is because it is a *useful* tool rather than a scientifically valid instrument that its continued use in the marketplace and in law enforcement and governmental interrogation rooms remains uninterrupted and even increasing.

As noted previously, Lykkens and Ekman argue that the subject must believe in the infallibility of the machine if the control question test is to be successful. On the basis of many discussions with many law enforcement and prosecution agency personnel, it seems apparent that the instrument sometimes ferrets out liars regardless of the technique used because, indeed, many subjects fear the machine. Professor Park Dietz, in a personal communication, reports that when fewer police departments had polygraphic equipment and fewer suspects had seen the machinery, suspects' hands could often be placed upon photocopying or similar machine plates and the suspects told that changes in their palmar readings could and would be read by the plates as lies if lies were being told. Confessions of crimes then were often forthcoming.[3]

Clearly, the machines have a definite mystique, quite potent to a significant proportion of the population. A standard technique used by many investigators enhances the impression that the instrument is infallible. Under the guise of friendly warnings to the suspects, technicians will often tell stories of episodes in which confessions were surprisingly, very spontaneously obtained via polygraphic lie detection, thereby increasing the fear levels of the potential subjects. After all, the subjects reason, how can they even attempt to fool the machine? The same examiners also rarely fail to tell usually apocryphal tales of individuals who tried all sorts of exotic methods to try to fool the machines—and, of course, routinely and uniformly failed.

Lykken refers to professional polygraphers whose experiences cause them to think about

> all those shame-faced individuals who have been led to confess assorted peculations under the pressure of the lie detector examination . . . [and the] . . . undeniable ability of the polygraph to function as a sort of 'painless third degree.' . . . If it were possible to make use of only these elicited confessions, discarding from further consideration all tests which did not produce such a result, then . . . questions of validity would be dealt with very differently. But, of course, once the population gets wind of the fact that no one is going to 'fail' unless he confesses, there are not likely to be any more valid confessions [*13*].

[3]P. Dietz, Medical director, Institute of Behavioral Sciences, Law and Public Policy, Department of Psychiatry, University of Virginia, personal communication, October 1987.

Mr. William Fedor, Deputy Director of the Counterintelligence and Investigative Programs of the Department of Defense, was kind enough to allow me to interview him in Washington, DC, on 11 Sept. 1987. Six months before, he and I had been panelists in a presentation on polygraphy during the Pacific Rim Meeting of the American Association for the Advancement of Science, in San Diego. In his interview, Mr. Fedor tended to confirm what the other law-enforcement personnel had told me about the machine and its ability to get people to confess to crimes. He recognized abuses of polygraphy in the marketplace and sometimes in routine criminal investigation. On the other hand, he defended the use of the program by the Department of Defense because of the need to validate and tighten national security measures.

He referred to the November 1983 report of the congressional Office of Technology Assessment (OTA) which was based on many hearings as well as interviews of some of the leading scientific proponents and opponents of polygraphic lie detection [*22*]. By and large, the report was quite critical of polygraphic lie detection. Mr. Fedor argued that the OTA was wrong when it criticized the Department of Defense for finding polygraphic lie detection scientifically valid. "We *never* said it was scientifically valid but, rather, that it was *useful*," he countered. Moreover, he emphasized the numerous safeguards which have been established by the Department to ensure that the rights of the suspects are being attended. "These aren't for fishing expeditions," he stated. A thoroughgoing criminal investigation must have been performed before, resulting in a high index of suspicion regarding the suspect.

The most sensitive use of the polygraphic lie detector by the Department of Defense is in the area of counterintelligence where, according to Mr. Fedor, it is always used, "Alongside a myriad of field techniques to determine just who might be an agent for whom." But even in these situations, no one is forced to submit to a polygraphic examination, "And the polygraphic data alone *never* leads to the Department taking action against anyone!" Refusal to take the test means that the Department must find the refuser a job equal in salary and level to that already held but deemed too sensitive to meet the index of suspicion regarding the individual's activities. The fact that the individual refused a polygraph test is sealed and not available to his or her personnel file.

The Deputy Director also told me that, on the other hand, the Counterintelligence Test Program can be applied to anyone deeply involved in very sensitive areas, *even where there is no suspicion at all about the individual.* One can only wonder what the California Supreme Court might think of that, perhaps even more than what they might think about the Program's testing of employees generally. However, sometimes reason must dictate that national security needs may have to override precautions and the right to maintain the "quintessential zone of human privacy." Usefulness, again, is the key here. If the tests might provide information that a person with highly secret knowledge might be a security risk by causing the person to talk about what he or she had done, or what he or she knows, it is hard to argue with the need for the polygraph in this specific area.

Apparently, those examinations are done as screenings. In those cases, even if the individual fails the polygraphic examination he or she continues to keep the same job, and again, the results are sealed. This, of course, begs the question as to why the polygraph is used at all in such cases. Mr. Fedor told me, "It's used because at times it causes people to talk, and valuable investigative information is gained. You would be amazed at what some people open up and talk about!"

This response, of course, only reiterates the opinions given above by Dietz, by Lykken who calls it a "painless third degree," and by the numerous law enforcement officials with whom I have spoken and who believe that the suggestibility factor is the most significant reason that the polygraphic lie detector "works." None of these people had any positive feeling at all about the scientific validity of the polygraphic lie detector, but

they all agreed with the Deputy Director of the Department of Defense Counterintelligence and Investigative Programs that polygraphic tests are very useful. Except for Mr. Fedor, they all described the mystique as very important. The Deputy Director would not enter into that area of speculation about how the machine actually works to become as useful as he feels it is.

He said only, "It causes things to come out of peoples' mouths." Most of the admissions in criminal and national security investigations come after the first charts have been run, and after prolonged pre- and post-examination interviews when the suspect will be told something like, "Look, you're having some trouble with question number three." The suggestibility factor must be considerable, as well as the obvious mounting pressure on the suspect. Pressure on suspects in criminal cases is a time-honored investigative tool, often used with excellent results by skilled law enforcement officers. Pressure on employees who are not suspects, or on job applicants, is a different matter. Pressure applied by a psychiatrist is a matter of even greater difference.

Psychiatrists and "Usefulness"

Mention of increasing pressures on the suspects may stimulate the memories of many psychiatrists, like me, who served in the armed forces 20 or more years ago. At that time, the safeguards described above by Mr. Fedor were nowhere to be found. Military intelligence personnel ran roughshod over a number of individuals, mainly homosexuals who were being investigated and rooted out with vehemence. As a then-Navy psychiatrist, I had personal experience with a number of individuals who had been tested with polygraphs and badgered to reveal the names of their associates who were, of course, also suspected of being homosexual.

The effects of this hounding on a number of very fragile young men sensitized me, as well as many of my colleagues, to the abusive capacities of the polygraphers who were working then, as well as the investigating agencies who employed them. Moreover, their attempts to develop a theory of scientific validity of polygraphic lie detection seemed to be an attempt to cover over the continued use of a coercive force against relatively helpless and certainly unsophisticated people. "Ve haff vays to make you talk," said the thin-lipped Nazi cliché villains in the movies of my youth. Later, we learned that the horrendous reality of those tyrants was even greater than painted by Hollywood's melodramatic excesses. But the same methods seemed to be reflected in the threatening message given forth by some of the military intelligence people I came to know in the late 1950s and early 1960s.

It is somewhat relieving to speak with the Deputy Director of the Counterintelligence and Investigative Programs of the Department of Defense and to find that many safeguards are now inherent in those programs. However, although it may be comforting to know that the Department of Defense is aware of the abusive capacities of polygraphy and polygraphers, it still causes some wonderment about the fact that there continues to be such official dependence upon a technique which is at least controversial, probably not very valid, and quite possibly abusive by its very nature.

Perhaps not everyone who has been tested has been able to fool the machines and the operators, as Safire said that William Casey was always able to do. Then again, if there is no pretense by the Department of Defense that they are doing anything scientifically valid, only *useful* (using their definition of that term), there is no real or effective rebuttal to their polygraphy program except to cite the citations that polygraphic lie detection is coercive, a "painless third degree." Although, insofar as we are aware, suspects are not beaten or tortured in the United States or Canada, perhaps some kind of third degree is still felt to be appropriate in police or counterintelligence work. Again, any investigative tool which is useful and not inhumane is probably an acceptable adjunct in law enforce-

ment and counterintelligence work. Perhaps no rebuttal ought to be forthcoming. The public safety is always a paramount issue.

But on occasion, if I am teaching a course at a medical school, or giving grand rounds, or addressing a meeting about forensic psychiatry, I am struck by a question asked *by a psychiatrist* about his or her use of the polygraph as an adjunct to the *psychiatric evaluation* of a suspect or even a litigant. I am always shocked by the question, asked much more frequently than one might think.

One source of my shock has to do with my fear that the examining psychiatrist might have taken to heart the scientific claims of the boosters for polygraphic lie detection. The naiveté represented by that viewpoint should cause universal alarm. Some psychiatrists, however, disagree with the stance presented here that it is actually inappropriate for them to have become involved at all in the determination of whether or not a suspect in a criminal investigation is lying.

Disagreement over a number of issues within forensic psychiatry creates a number of contradictory opinions and, unfortunately, occasional misinterpretation among observers of this specialty. My own opinion, seconding the thoughts of many distinguished teachers in forensic psychiatry, is that lie detection is a task far better left to police or other criminal investigators. Psychiatrists know that anybody *can* lie, but they may not be the best people to determine if the individual in question *is* lying.

In his or her attempts to determine that, the psychiatrist might be attempting to do something which is outside the realm or appropriate sphere of psychiatric expertise, defined strictly as providing a clinical evaluation of the individual at question. The psychiatrist might also be doing something which contradicts the purpose for which anxiety-reducing techniques were originally taught. In an attempt to perform an adequate clinical evaluation, an examining psychiatrist will try to reduce the examinee's anxiety to reduce defensiveness and guarding, thereby promoting the production of more material from an eased subject. The use of a polygraph automatically increases the examinee's anxiety, a situation antithetical to accepted and proven purposes and technique. In no way can this be analogized to the use of what have been described as stress interviews, in which an examiner will try to determine the examinee's response to pressure as a diagnostic index.

Usually, when I ask a question about the psychiatrist's use of the lie detector, he or she will respond somewhat defensively. The psychiatrist will often add, somewhat apologetically, that he or she knows that the machine and the technique are not scientifically sound, but that it is *useful*, and that more information can be obtained about whether the accused did what was alleged. The late Jonas Robitscher, whose 1976 Isaac Ray Lectures centered about the concept of the abuse of psychiatric power, would probably only shake his head sadly [*23*].[4]

As Diamond and Louisell said,

> The law must recognize that the usefulness of psychiatric evidence is not determined by the exactness or infallibility of the witness's science. Rather, it is measured by the probability that what he has to say offers more information and better comprehension of the human behavior which the law wishes to understand. . . . The psychiatrist is perfectly aware of the fact that the clinical history obtained from the patient is self-serving and distorted. He knows that the information provided by the family and friends may have relatively little validity. . . . The psychiatrist is especially trained to assimilate information from a wide variety of sources, to evaluate each fact, to discount some, to emphasize others, and to ignore still others. He then makes his own personal observations of the patient, puts everything together and arrives at a conclusion. This is the clinical method—the procedure by which all doctors diagnose and heal

[4]See also J. Robitscher, *Isaac Ray Lectures*, The American Psychiatric Association, Washington, DC, 1987.

> the sick. Only the quacks pretend they have X-ray eyes and can penetrate with one glance into the essence of the pathology of the body and mind [*24*].

But some psychiatrists feel a need to deliver more than what the limits of their clinical, professional expertise authorizes. One must wonder about their opinion of their own profession.

In a personal communication, Dr. Jonas Rappeport commented that psychiatrists who use the polygraph are attempting to provide treatment for themselves and their own doubts about their capacities to deal clinically with the possibility that examinees are untruthful.[5] Their feeling of a need for such treatment is a commentary of its own.

Koryagin and others have educated us to the fact that there continue to exist in the world places where psychiatrists function as law-enforcement officers [*25*]. In the United States and Canada, no such confusion about identities must occur. If psychiatrists are to serve the state in any capacity, it has been determined from the Nuremberg trials that they can do so only under the most stringent of controls and ethical bounds which ensure that only the severest scientific standards underlie their activities. Usefulness is not enough for psychiatrists, especially if the usefulness is directed toward nonpsychiatric goals. Standards of practice must be differentiated between psychiatrists and law enforcement personnel. We need to demonstrate that we have learned much from the grotesque and frightening activities of Nazi and Soviet psychiatrists.

Psychiatrists must be in the forefront of those who object to the gross abuses of the polygraphic lie detection industry, which will probably continue in the areas permitted under the new law. Psychiatrists are the medico-scientific body which must speak out more often and more effectively about the fallacy of the basis of the entire technique which measures *something*, albeit not necessarily objectively verifiable truth or, for that matter, falsehood to the degree careful enough to consider it relatively reliable and valid. The nonlinearity of the responses are part and parcel of contemporary psychiatric knowledge.

The question is occasionally asked if a difference in ethical standards exists between clinical/therapeutic psychiatry and forensic psychiatry. Obviously, ethical tenets are ethical tenets; situational ethics have little place in this or any other professional field. If this caveat is taken seriously, it stands to reason that no psychiatrist ought to use an instrument which works (if it does work) by coercing and frightening the subject. The use of such a procedure by a psychiatrist represents a clear abuse of psychiatric power.

It is frequently hard enough to perform an adequate and careful clinical evaluation of a suspect or a litigant. Compounding that difficulty with a misguided attempt to determine if the person is telling the truth (whatever that is, whether objectively verifiable or whether "transcending perceived experience") only serves to demean the true function of a psychiatrist. Certainly, a psychiatrist can diagnose sociopathy or antisocial personality via standard clinical means and by reviews of historical material. The psychiatrist can then speak about the possible tendencies of people like that to lie. On the other hand, we know that everybody can lie and that many people do. They do not have to be in trouble with the law or with other people to do so, and they certainly do not have to be sociopaths. Possibilities are one thing; definite statements about lying are another.

The nature of the person in trouble with the law or with other people is the important issue for every psychiatrist, forensic or clinical. Coercing a person is not a proper job for any psychiatrist.

[5]J. Rappeport, Medical director, American Academy of Psychiatry and the Law, personal communication, October 1987.

References

[1] Kleinmuntz, B. and Szucko, J. J., "On the Fallibility of Lie Detection," *Law and Society Review,* Vol. 17, 1982, p. 91.
[2] Raskin, D. C., "The Truth About Lie Detectors," *The Wharton Magazine,* Fall 1980, p. 29.
[3] "House Passes Limited Ban on Polygraph Tests," *The Tribune,* San Diego, 5 Nov. 1987, p. A-26.
[4] Goldzband, M. G., "Would Mommie Lie?" *Proceedings,* American Academy of Matrimonial Lawyers, 1983.
[5] *Long Beach City Employees Assn. v. City of Long Beach,* 41 Cal. 3d. 937; Cal. Rptr. 90, 719 P. 2d 660, June 1986.
[6] *American Medical News,* 27 March 1987, p. 8.
[7] Ekman, P., *Telling Lies,* Berkley Books, New York, 1986.
[8] Fraser, G., "Use of Polygraph Evidence Vetoed by Supreme Court," *Globe & Mail,* national ed., Toronto, 16 Oct. 1987, p. 1.
[9] "Report to Congress for Fiscal Year 1986," Department of Defense Polygraph Program, Office of Undersecretary of Defense, Policy, Washington, DC, 1986.
[10] Reardon, V., "Polygraph Testing: Prohibit It," *The Tribune,* San Diego, 11 Aug. 1987, p. B-7.
[11] Saxe, L., "Business Has No Business With Lie Detectors," *Washington Post,* 29 Dec. 1988.
[12] Lynch, B. E. and Bradford, J. M., "Amnesia: Its Detection by Psychophysiological Measures," *Bulletin of the American Academy of Psychiatry and Law,* Vol. 8, 1980, p. 288.
[13] Waid, W. M., Orne, E. C., Cook, M. R. et al., "Meprobamate Reduces Accuracy of Physiological Detection of Deception," *Science,* Vol. 212, 1981, p. 71.
[14] Lykken, D., "Psychology and the Lie Detector Industry," *American Psychologist,* Oct. 1974, p. 725.
[15] Raskin, D. C., "The Polygraph in 1986: Scientific, Professional and Legal Issues Surrounding Application and Acceptance of Polygraphic Evidence," *Utah Law Review,* Vol 29, 1986.
[16] Lykken, D., *A Tremor in the Blood,* McGraw-Hill, New York, 1981, p. 118.
[17] Raskin, D. C. and Podlesny, J. A., "Truth and Deception: A Reply to Lykken," *Psychology Bulletin,* Vol. 86, 1979, p. 54.
[18] Safire, W., "Physician (and Officials), Heal Thyself," *San Diego Union,* 11 Oct. 1987, p. C-3.
[19] Freud, S., "Psycho-Analysis and the Ascertaining of Truth in Courts of Law," in *Collected Papers* (translated by Riviere), Vol. 2, 1924, p. 13.
[20] Skolnick, J. H., "Scientific Theory and Scientific Evidence: An Analysis of Lie Detection," *Yale Law Journal,* Vol. 70, 1961, p. 694.
[21] *The Random House Dictionary of the English Language,* Random House, New York, 1966, p. 1521.
[22] "Scientific Validity of Polygraph Testing: A Research Review and Evaluation—A Technical Memorandum," Office of Technology Assessment, U.S. Congress, Washington, DC, 1983.
[23] Robitscher, J., *Isaac Ray Lectures,* The American Psychiatric Association, Washington, DC, 1976.
[24] Diamond, B. L. and Louisell, D. W. "The Psychiatrist as an Expert Witness: Some Ruminations and Speculations," *University of Michigan Law Review,* Vol. 63, 1965, p. 1335.
[25] Koryagin, A., "Address before Annual Meeting." *American Academy of Psychiatry and Law,* Ottawa, 15 Oct. 1987.

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