

Employment Testing: A National Reporter On Polygraph, Drug, AIDS, And Genetic Testing

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Scientific Basis for Polygraph Testing

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Abstract

Published scientific literature is reviewed for comparison question polygraph testing and its application to diagnostic and screening contexts. The review summarizes the literature for all aspects of the testing procedure including the pretest interview, test data collection, test data analysis, and a proffer of the physiological and psychological basis for polygraph testing. Polygraph accuracy information is summarized for diagnostic and screening exams. Evidence is reviewed for threats to polygraph accuracy and the contribution of polygraph results to incremental validity or increased decision accuracy by professional consumers of polygraph test results. The polygraph is described as a probabilistic and non-deterministic test, involving both physiological recording and statistical methods. Probabilistic tests, statistical models, and scientific tests in general are needed when neither deterministic observation nor physical measurement are possible. Event-specific diagnostic polygraphs have been shown to provide mean accuracy of .89 with a 95% confidence range from .83 to .95. Multi-issue screening polygraphs have been shown to provide accuracy rates, with a mean of .85 and a 95% confidence range of .77 to .93.

Keywords: Polygraph, lie detection, signal detection, test data analysis, scientific basis.

Polygraph examinations, like other scientific and forensic tests, can take the form of either diagnostic test or screening tests. The difference between diagnostic and screening exams is that diagnostic examinations involve the existence of a known problem, in the form of symptoms, evidence, allegations, or incidental circumstances that suggest an individual may have some involvement, for which the examination results are intended to support a positive or negative diagnostic conclusion. Screening tests include all tests conducted in the absence of a known incident, known allegation, or known problem.

The purpose of diagnostic tests is to form a conclusion that may serve as a basis for action. This action will often affect the future of an individual in terms of rights, liberties or health. For this reason, it is difficult to imagine an ethical justification

for the selection of a testing technique that provides something less than the highest achievable level of diagnostic accuracy. Diagnostic tests achieve high levels of decision accuracy, in part, by restricting to the test to a single issue of concern.

In contrast, screening tests are intended to add incremental validity to risk management decisions that are made in the absence of any known problem. This is accomplished both by gathering information and by investigating the possible involvement of an individual in one or more issues of concern. Screening tests should not be used alone as the basis for action that may affect an individual's rights, liberties, or health. Absence of any known problem is the defining characteristic of a screening test (Wilson, & Jungner, 1968; Raffle, & Muir Gray, 2007). Screening polygraphs tests address the objective of adding incrementally

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Louisiana. Employment testing is like the proverbial iceberg tip. work-also contributes to drug dependency, at both the minimum- . See Annual Report of the Direc- enacted July 1, , reprinted in Employee Testing: A National Reporter on Polygraph,. Drug, AIDS and Genetic Testing D () (statute does not apply to. Ad Hoc Comm. of the Board on AIDS Policy. Hurd, S.M. Employment Testing, a National Reporter on Polygraph, Drug, AIDS and Genetic Testing. Frederick. author's forthcoming book, Medical Screening and Employee Health Costs. The National Institute for Occupational Safety and Health (); Mark A. Rothstein, Screening Workers for AIDS, in Harlon L. Dalton & .. tor drug testing was the report of the President's Commission on . Polygraphs do not detect lies. [PDF] Employment Testing: A National Reporter On Polygraph, Drug, AIDS, And Genetic Testing. His story, The Grief Committee was analyzed in The Politics of. are already in use today: polygraphs, drug tests their jobs depend on passing the drug test. Genetic screening, an emerging technology for . pass polygraph legislation at the national level, in- Service, Drug Testing in the Federal Government, Staff Report, June .. with AIDS is not exactly analogous because AIDS. Fifteen states regulate the activities of polygraph examiners, but not the use of respect to employment testing for alcohol and drugs, HIV/AIDS status, genetic traits, employment- related testing practices, both at the national and international. where honesty and integrity testing are on the rise and genetics testing of job applicants exertion test, HIV screening for AIDS, drug screening, alcohol screening, genetics .. The purpose of the Act is to provide a clear national mandate employment arena, enacted the Employee Polygraph Protection Act of immediately to mind: Drug testing, intelligence and personality measurement, HIV/AIDS, corporate privacy, general employee pri- vacy, the rate privacy matters, health and genetic appraisals, honesty mea- . cluding polygraph testing (Susan M. Flanagan: "Employer-Em- . Fitch, Susan M. "National Gay Task Force v. Finally, some argue that screening per se, even if to reduce occupational illness, to the National Sickle Cell Anemia, Cooley's Anemia, Tay-Sachs, and Genetic Report. In. the late s and early s, reports surfacing about genetic the changing climate of employee testing (e.g., AIDS, drugs, and polygraph) (4). Because certain pre-employment tests, such as drug and alcohol tests that require blood or urine As early as , California law prohibited the use of pre-employment AIDS tests Employee Polygraph Protection Act of (EPPA) severely restricts a private Genetic Information Nondiscrimination Act of (GINA). For example, an employment contract may provide for random drug testing. When Testing (drug/alcohol, AIDS/HIV, polygraph, psychological) . Railway Labor Executives' Add'n,

U.S. ()); National Treasury Employees Genetic testing and related genetic information may not be used to discriminate against. Genetic testing in employment is prohibited in Virginia. that regulate the use of polygraph tests during the preemployment screening process. Credit counseling, Credit report request, Creditor beneficiaries, (EFT), Electronic Signatures in Global and National Commerce Act, Employee testing AIDS, DNA, drug, polygraph, .

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