Scientific Validity of Polygraph Testing: A Research Review and Evaluation

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SCIENTIFIC VALIDITY OF POLYGRAPH TESTING

A RESEARCH REVIEW AND EVALUATION

A TECHNICAL MEMORANDUM

NATIONAL PROPERTY.



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Foreword

This technical memorandum presents the results of the Office of Technology Assessment's (OTA) review and assessment of the scientific evidence on the validity of polygraph testing. Conducted at the request of Rep. Jack Brooks, Chairman, House Committee on Government Operations, and Rep. Frank Horton, the Ranking Minority Member, the OTA memorandum is intended to assist the committee in its deliberations on proposed changes in polygraph use by the Federal Government.

As requested, OTA has limited this technical memorandum to issues directly related to the scientific validity of the polygraph. OTA did not consider utility, privacy, constitutional, and ethical issues, among others that have been raised in the debate over polygraph testing.

We first discuss the various types of polygraph testing procedures and ways in which the polygraph is used, and then summarize the judicial, legislative, and scientific controversy over polygraph testing validity. Next, we review and evaluate both prior reviews of the scientific research on polygraph validity and the individual research studies. Finally, we discuss the range of factors that may affect polygraph validity and the possibilities for future research, and present OTA'S conclusions about the scientific evidence for current and proposed Federal Government polygraph use.

In preparing this memorandum, OTA has drawn on research information available from a wide variety of sources, including the major Federal Government polygraph users, the American Polygraph Association, various private polygraph practitioners, and polygraph researchers both in the United States, and abroad.

In addition to the members of the project advisory panel, this memorandum benefited from the consultation and review of a large number of persons in the Federal Government, universities, and the polygraph community. It is, however, solely the responsibility of OTA, not those who advised and assisted us in its preparation.

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