



Standard Terminology Relating to Forensic Psychophysiology¹

This standard is issued under the fixed designation E 2035; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This is a compilation of terms and corresponding definitions used in forensic psychophysiology. Legal or scientific terms that generally are understood or defined adequately in other readily available sources may not be included.

1.2 A definition is a single sentence with additional information included in notes. It is reviewed every five years, and the year of the last review or revision is appended.

1.3 Definitions identical to those published by another standards organization or ASTM committee are identified with the abbreviation of the name of the organization or the identifying document and ASTM committee; for example, ASME is the American Society of Mechanical Engineering.

1.4 Definitions of terms specific to a particular field are identified with an abbreviation.

2. Significance and Use

2.1 These terms have particular application to the scientific discipline of forensic psychophysiology. In addition, a hierarchy of sources of definitions are used in the development of this terminology. The hierarchy is as follows: Webster's New World Dictionary, Third College Edition; technical dictionaries; and, the Compilation of ASTM Standard Definitions. The subcommittee developed a suitable definition after all of the sources in the hierarchy are found wanting.

3. Terminology

3.1 Terms and Definitions:

cardiovascular tracing, *n*—a display of physiological patterns of the subject's relative blood volume and pulse rate. The cardiograph component records this activity.

electrodermal tracing, *n*—the display of physiological patterns of either skin resistance or skin conductance obtained through exosomatic recording with a galvanograph component.

forensic psychophysiology, *n*—the scientific discipline dealing with the relationship and applications of PDD tests within the legal system. It encompasses the academic discipline that provides the student, the practitioner, and the

researcher with the theoretical and applied psychological, physiological, and psychophysiological fundamentals for a thorough understanding of PDD tests, and the skills and qualifications for conducting PDD examinations. The modifier A forensic \cong delineates and delimits this discipline from the broader discipline of psychophysiology.

PDD examination, *n*—a process that encompasses all activities that take place between a PDD examiner and an examinee during a specific series of interactions. These interactions may include the pretest interview, the use of the polygraph to collect physiological data from the examinee while presenting a series of tests, the test data analysis phase, which may be supplemented in a post-test interview phase.

psychophysiological veracity (PV) examination, *n*—see definition of PDD

PDD examiner, *n*—someone who has successfully completed formal education and accredited training in conducting PDD examinations and, if appropriate, is certified or licensed by their agency or state to conduct such examinations.

physiology, *n*—the branch of biology dealing with the functions and vital processes of living organisms or their parts and organs.

polygraph examiner, *n*—a term used synonymously with PDD examiner. In the evolution of terminology within this discipline, the term APolygraph Examiners \cong replaced the antiquated appellation ALie Detector Operator \cong (see definition of PDD examiner).

polygraph instrument, *n*—a diagnostic instrument used during a PDD examination, which is capable of simultaneously monitoring, recording, and measuring at a minimum, respiratory, electrodermal, and cardiovascular activity as a response to auditory or visual stimuli.

polygraphy, *n*—see definition of PDD

psychology, *n*—the science dealing with the mind and with the mental and emotional processes.

psychophysiological detection of deception (PDD), *n*—the academic discipline that provides the student, the practitioner, and the researcher with the theoretical and applied psychological, physiological, and psychophysiological fundamentals for a thorough understanding of PDD tests and the skills and qualifications for conducting PDD examinations (see polygraphy).

psychophysiology, *n*—the study of interactions between mental and physiological processes.

¹ This terminology standard is under the jurisdiction of ASTM Committee E-52 on Forensic Psychophysiology and is the direct responsibility of Subcommittee E52.06 on Terminology.

Current edition approved August 10, 1999. Published October 1999.