

# Differences, reliability and validity essay examples

[Law](#), [Evidence](#)



A polygraph test measures the pulse, blood pressure, respiration, perspiration and skin conductivity of a test subject, in the belief that the telling of a truth or a lie has an effect that manifests in these physiological indices. Throughout its history and since its invention, the polygraph has enjoyed claims of up to 90% accuracy from its advocates. However, the accuracy of the polygraph has widely been criticized as there is not enough evidence to support these claims. Further, research shows that most studies carried out to establish the validity of the polygraph do not meet scientific standards of quality and rigor. Several difficulties plague the study of the validity of the research, and no research carried out has been able to get scientific approval. The polygraph has a broad range of application, from forensics to employment screening. It is used by governments, the military, private firms, groups and individuals. It is most well-known as a “lie detector” and for its application in law enforcement. The lack of consensus and evidence in the field has led some to label the polygraph as “junk science” and pseudo-science.

The basic underlying assumption behind the polygraph, that certain physiological states are induced in the event of deception is based on knowledge of physiology and psychology. These emotional states, however, occur even in the absence of deception and could be caused by various other factors. Polygraph research has not developed theories and frameworks addressing the underlying assumptions.

The voice stress analyzer is one of the methods that seek to detect deception through demeanor. The underlying assumption is that when people lie they are under (more) stress, and this inevitably shows in their

voice. Expectedly, modern voice stress analyzers are computational. Although it has purportedly high levels of accuracy, empirical research has not been as encouraging. Once again, no evidence is available to prove the validity of the voice stress analyzer. Other methods of detecting deception do not show much promise as well. Graphology, the analysis of handwriting in the belief that it shows insight into a person's emotional state and psychological traits, is considered by most people in the scientific community as a pseudo-science. Linguistic analysis could, in theory, be used to tell the truth from lies, but not sufficient research has been done and consequently not enough evidence has been gathered. The use of body movement in distinguishing truth from lies is very promising, but has shown little consistency across large numbers of study. The technique is also very labor-intensive. The polygraph is still useful as a deterrent and as a tool to elicit confessions.

In the book "The Lie Detector, The history of an American obsession", and to people who work with polygraphs, "fishing expeditions" refers to blind questioning and baiting of the subject in the hopes of getting the answer by trial and error and luck. For example, one might question a murder suspect of the hidden body's location by pointing at (random) points on a map. The book reinforces the image of Chicago as the capital of American vice. It paints the picture of Chicago as crime-ridden, full of corruption and a dysfunctional police department.

The Michael Brown Jury Investigation refers to the grand jury that was formed to decide whether to indict Darren Wilson, the police officer involved in the shooting of the Michael Brown. The jury decided not to indict Wilson,

which almost never happens. The prosecutors could have been compelled to bring the case to a grand jury due to public pressure, not necessarily because they felt they could get an indictment. Several inconsistencies appear to arise from the investigations, and the witnesses gave differing accounts of the events. However, it appears that the professionals and individuals who were tasked with the case, from the detectives to the pathologists, all did their jobs with integrity and the truth prevailed in the end.

## **Works Cited**

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