Article: 2802
Topic: 50 - Forensic Psychiatry

DECEIT AND LIE DETECTION USING AUTOMATED MICROEMOTION ANALYSIS

R. Ptacek[1,2]

[1]Psychophysiological and Behavioral Laboratory, Police Academy of the Czech Republic, [2]Clinic of Psychiatry, 1st Medical Faculty of Charles University, Prague, Czech Republic

Introduction: Deceit and lie detection has been attracting attention of forensic psychologists and psychiatrists for several decades. Different polygraph and imaging methods are being thoroughly examined, usually without really doubtless results. Paul Ekman proposed an interesting theory on micro emotions that may be a demonstration of uncontrolled part of human behaviour and thus may represent an interesting way to detect lie or deceit. Currently there are available on the market several systems for automatic micro emotions detection. These systems show acceptable level of reliability and thus may be used for research purposes.
Objectives and aims: The aim of the study was to analyse if computerized system for micro emotion analysis (Face Reader) can be used for distinguishing liars from non-liars. For that purposes classical experimental double blind setting was established. The group of university students (n=40) was divided into a subgroup exposed to a video scene and a subgroup not exposed (n=20). The goal of further analysis was to distinguish there two groups using Face Reader.
Results: In our pilot study, we identified 100 % truth tellers and 90% of lie tellers.
Conclusions: Upon the presented study we may suggest that software analysis of micro emotion represents an interesting way for detecting lie and deceit. Although the current state of knowledge does not allow using this method in forensic setting, the possibilities and limits of the method should be properly examined.

https://doi.org/10.1016/S0924-9338(13)77390-5 Published online by Cambridge University Press