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BEHAVIORAL PROFILING

FACTS AND MYTHS ABOUT BODY LANGUAGE AND LIE DETECTING



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INTRODUCTION

There are many myths around the topic of non-verbal communication. A generation of readers grew up on Barbara and Allan Pease's book "Body Language." Popular knowledge is not keeping up with newer scientific articles. There are regular new studies and publications on emotions, their source and expression in the body. However, we still do not know how emotions are constructed, to what extent they are culturally universal or if they can be innate.

In the media, a variety of experts interpret the behavior and gestures of famous people, giving us a deluded impression that everyone can be "read" by learning body language.

In the market there is a wide choice of books and trainings that promise us to acquire body language literacy in any situation. The same goes for detecting lies.

However, interpreting body language is not as conclusive as it may seem. It is true that humans present various types of behavior, gestures and expressions that are common and easily recognizable to others. However, on the other hand, **each of us also has one's own unique emotional code**. That can cause situations in which the same gestures and mimes are used in different situations in conjunction with other emotions, feelings and moods.

Today, technology appears to help. Biometrics and biometric tools are used to study consumers, voters or to secure our safety – for example, modern "lie detectors" at airports are tested. However, little is said about how such technologies work, when they are effective or what their limits are.

THE AIM OF PUBLICATION

The purpose of the following publication is to organize knowledge of body language in detecting lies, using current scientific knowledge and experience of people who interview ("read") people on daily basis.

It will answer the following questions:

- ✓ What is criminal, psychological and behavioral profiling?
- ✓ What behavioral profiling, which we use e.g. at airports, includes?
- ✓ What myths revolve around the topic of non-verbal communication?
- ✓ Can body language and facial expressions be culturally universal?
- ✓ Are non-verbal messages helpful in detecting lies?
- ✓ Can you detect a lie only by observing body language?

I. PROFILING

Profiling is the process of extrapolating information about a person and their environment based on acquired or known data, features and trends. In particular: analysis of a suspected or indicated person on the basis of observed characteristics, behavior and appearance.

Criminal profiling is a subdiscipline of forensic criminology. It is therefore a discipline of criminology, rooted in both behavioral and forensic sciences.

Psychological profiling is described as a method of identifying suspects, which aims to identify and describe the psychological, emotional and personality characteristics of a person on the basis of behavior and actions or things left at the crime scene.

A term **behavioral profiling** is most often associated with airport security and observation of passengers' behavior. It is also often combined with "CSI" or "Lie to me" series, in which detectives are experts in reading human behavior.

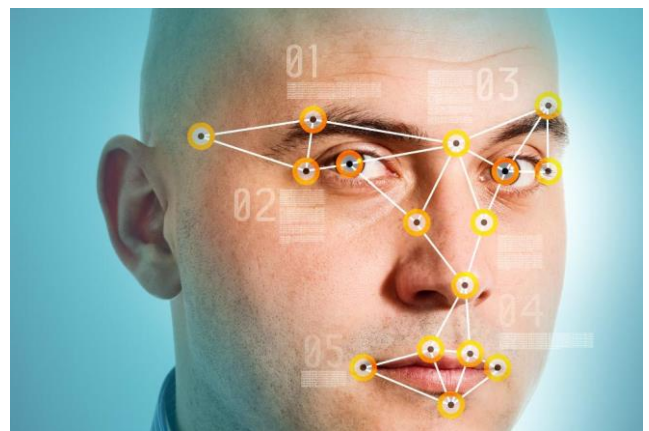
Behavioral profiling focuses on analyzing people's behavior. It covers the topics of non-verbal communication, psychology of emotions, psychology of lies, issues of interpretation of appearance and behavior (e.g. criminals), typology of liars, anti-social personalities and linguistics. Therefore, it is not possible to become an expert in "reading body language" in one day. As one may notice, behavioral profiling is a much broader concept than body language itself.

CRIMINAL PROFILING

Criminal profiling is based on deduction and analysis of physical, habitual, emotional, psychological and even vocational criminals' features. There is, however, a wide variety of criminal profiling methods, and all of them vary depending on theory used, experience or even profiler's personality.

The diversity and lack of classification of profiling methods used worldwide – in special services or consulting agencies - has led to professional confusion. Profilers are often professionally experienced, but not sufficiently educated in the field of forensics and behavioral sciences. They do not study the same degree course, and therefore they are not sure who they are and where they fit in the structure of criminal justice. The lack of a regulated profession means that it is difficult to classify profilers among e.g. court experts.

This can cause resentment and skepticism from other professionals or judicial staff.



The media reinforce the myth of profilers by presenting them as superhumans with super powers. Public opinion often perceives profilers as a more specialized form of medium or psychics. Unfortunately, too many inexperienced or uneducated profilers take advantage of this lack of professional consistency by presenting a false picture of a profiler's work and capabilities.



BEHAVIORAL PROFILING

Behavioral profiling is not a new field and is based on several dozen years of research. Behavioral patterns have involved psychologists and scientists since at least the mid-sixties. The pioneering work was done by the Behavioral Analysis Unit, which was established at the FBI. Its studies and analyzes were certainly groundbreaking for this discipline. The process of building the unit and its assumptions was described in the book "Mindhunter" and depicted in the series of the same title.

Currently, thanks to the support of artificial intelligence, machine learning and data analyzing (big data) as well as psychological profiles are becoming extremely accurate. For example, scientists have already found a connection between facial features and sexual orientation or between the style of walking and one's temperament. Not to mention the companies that created the algorithm that helps to identify a terrorist only on the basis of one's facial features - just as Lambrosso tried, only on the basis of a much smaller amount of data and basing on incorrect initial assumptions.

Due to a huge amount of data shared and left on the Internet, profilers' work becomes easier and more efficient.

PROFILING AT AIRPORTS

Behavioral profiling is used as an additional tool to support border guards in the process of detecting suspicious people or dangerous behavior at airports. In this case, it is based only on analyzing and assessing an individual on the basis of one's external behavior and physical features.

A profiler does not have any additional information about the person being observed - one does not know a crime scene, has no witnesses to talk to, and at first, has no evidence. A border guard or policeman can only use one's sense of observation and experience. In less than 60 seconds they must assess someone's behaviour as well as the appearance, clothing, luggage, documents and companions.

Predictive profiling

That is why, we often name this type of profiling, predictive. Basing on documents, scanning elemental information available and observing types of behavior, we predict who may be a dangerous or law-breaking individual. Behavioral indicators can be selected by a type of crime.



My experience shows that it is easier to create separate schemes and patterns for individual types of behavior / personality, e.g. depending on the type of crime committed (for pedophiles, drug smugglers, human traffickers, counterfeiters, cheaters, terrorists, etc.).

Historical example

One of the most well-known examples of successful behavioral profiling is the case of Ahmed Ressam, a millennium bomber born in Algeria. On December 14, 1999, he was detained in Port Angeles, Washington, when he attempted to smuggle components of a payload across the Canadian border. Ressam became a suspect when during a routine interrogation at the border a customs agent noticed his unusual travel route. In addition, Ressam seemed stiff and unnatural in his behavior, which led to his search.

At that time, the head of the US customs service was Raymond Kelly of the New York Police. He implemented a new, additional form of profiling based on observation of behavioral indicators. Under Kelly's leadership, **the rate of detection of illegal attempts to cross the border in the customs zone increased by 25 percent, while the overall number of searches decreased by 75 percent.**

Six factors

Raymond Kelly is often portrayed as a pioneer in effective behavioral profiling at airports, but this approach is somewhat simplified. **The profile he implemented was based on six factors, two of which were behavioral** - indicators of suspicious physical appearance and inconsistent behavior. The other four factors concerned the search results of tracking dogs, incorrect or suspicious looking documents, as well as the use of intelligence work and contraband services.

It is worth noticing that behavioral profiling was a supporting tool. The guards relied primarily on the so-called hard indicators and data, not just on people's behavior. The addition of behavioral indicators helps to increase the detection of inconsistent behavior, but should not be the basis for actions.

CAN YOU BECOME A „HUMAN LIE DETECTOR”?

Lie detection - talent or training?

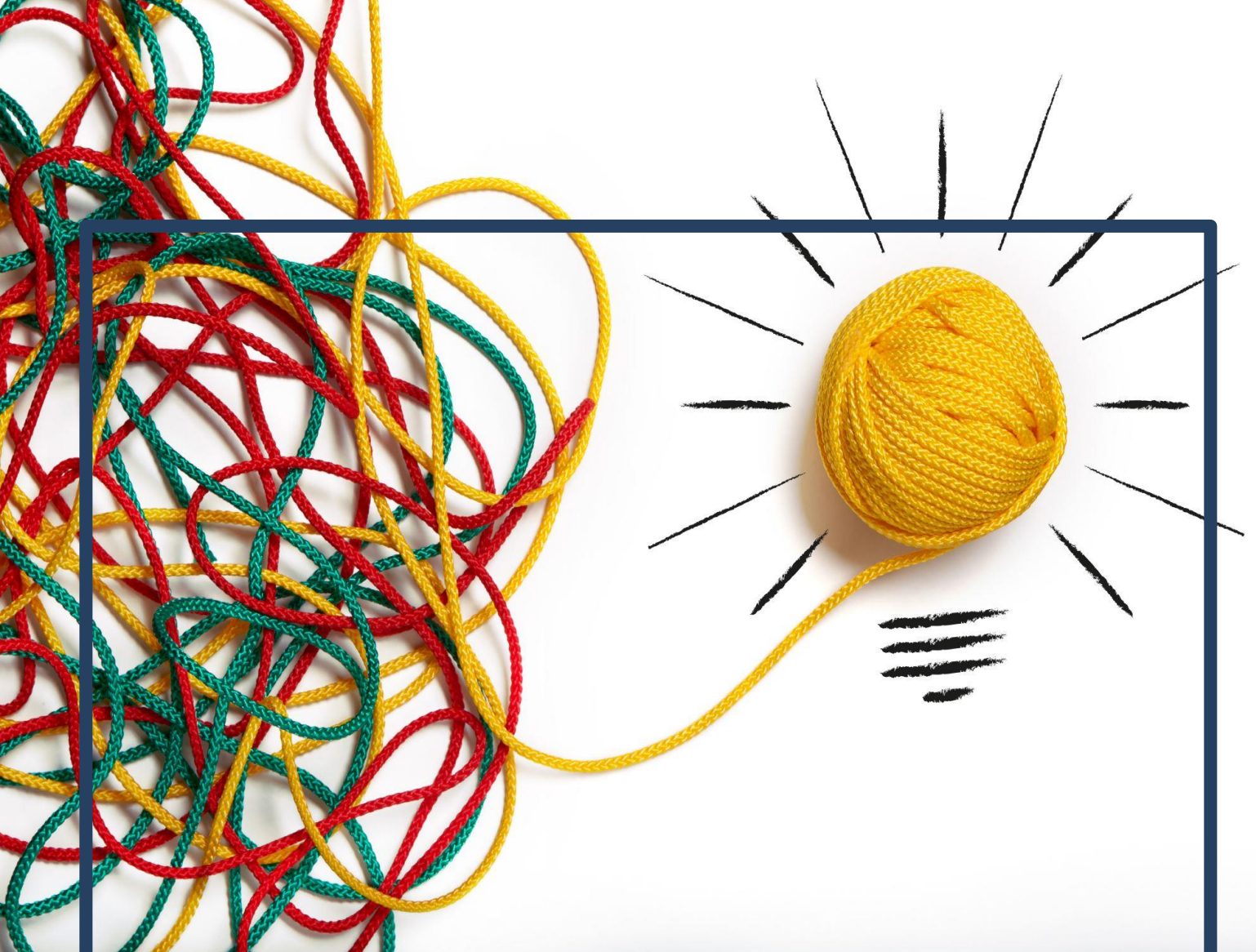
Statistically, an adult can tell the truth from a lie in 54% of cases. This means that we are equally right and wrong when we are to determine whether someone is telling the truth or lying.

Research suggests that cases of innate talent for detecting lies that will last a lifetime are extremely rare. It is estimated that only 0.25% of humanity is so-called natural lie detectors. More often it is a combination of certain predispositions, targeted recruitment and long, specialized training, e.g. in special services. Then the detection rate increases to 70-95% of hits.

Israeli example How to train reading skills?

Israeli security forces, which have a reputation as one of the best training units in recognizing human behavior in the world, begin with educating their officers. The vast majority of them already have military experience, because it is compulsory. Then, officers are tested to identify individuals with above-average intelligence and particularly predestined personality types.

Recruits selected this way undergo a **nine week** training in recognizing dangerous behavior and behavioral profiling.



**WHY IS IT SO DIFFICULT
TO BECOME A PROFILER
AFTER A WEEKEND COURSE?**

PROFILER SKILLS

Regardless of the profiling method used, each profiler must necessarily have the following knowledge, skills and abilities:

- Knowledge of the justice system
- Knowledge of various investigative methods
- Knowledge of forensics and various methods of collecting and examining physical evidence
- Knowledge of psychology of victims and criminals
- Knowledge of human psychology and neuroscience
- Knowledge of mental diseases
- Knowledge of anti-social personality disorders
- Knowledge of drug and alcohol influence on humans
- Knowledge human anatomy and physiology
- Knowledge of cultural differences
- Ability to stay up to date with the latest scientific research and technologies.
- Ability to remain honest and ethical despite external pressures and proposals

That is why, basic training in recognizing human behavior for specialists should be at least 5 days long. Then, the practical part of the training should be envisaged in the given field of application - the theory should be applied in practice.

WHAT DOES THE TRAINING INCLUDE?



During the training offered by INC, participants gain a comprehensive insight into the world of behavioral profiling based on academic research as well as verified and proven knowledge.

In addition to areas related to security, the topics discussed are particularly useful in the departments of management, recruitment, sales and negotiations.

TRAINING MODULES

I. WPROWADZENIE DO INTRODUCTION TO PROFILING

- 1) Predispositions
- 2) Psychology of emotions and social psychology
- 3) Personality psychology
- 4) Brain function
- 5) Psychophysiology

II. TRAPS AND MISTAKES IN PEOPLE'S ASSESSMENT

- 1) Susceptibility to errors in assessment
- 2) Defense mechanisms
- 3) Personality conditioning

III. ANTI-SOCIAL BEHAVIORS

- 1) Manipulations recognition
- 2) Sociopaths
- 3) Psychopaths
- 4) Narcissists
- 5) Toxic personalities

IV. NON-VERBAL COMMUNICATION

- 1) Body language analysis
- 2) Voice analysis
- 3) Mimic expression analysis
- 4) Microexpression analysis

V. LIE DETECTION

- 1) Types of liars' behavior
- 2) Cultural conditioning
- 3) Patterns of dishonest behaviour
- 4) Identification of inconsistent behavior

VI. LINGUISTIC ANALYSIS OF TEXTS AND STATEMENTS

- 1) Language structures in lie detecting
- 2) Patterns of dishonest statements
- 3) Analysis of differences between a real and imaginary text

VII. IDENTIFICATION OF VICTIMS

- 1) Psychology (proces) of becoming a victim
- 2) Predispositions
- 3) Victim behavior and recognition
- 4) Stress versus PTSD

VIII. INTERVIEWING

- 1) Application of profiling in interviews
- 2) Use of body language in conversation
- 3) Effective questioning



II. BODY LANGUAGE IN LIE DETECTING – FACTS AND MYTHS

Body language accompanies us everywhere. Faces and eyes attract our attention like a magnet. Even when we are silent and sit still, we communicate non-verbally. We were originally programmed to read and respond to body language. According to research, even few months old children notice inconsistencies between the body language, facial expressions and voice. If an adult leaning over a child has a tense body and face, but speaks in a sweet voice with an artificial smile, the baby will feel threatened (cheated).

If trust and sympathy are present, non-verbal messages are tuned. In conflict situations, people's bodies turn and move away from each other. At the subconscious level, body language is completely understandable for us, subcutaneously we always receive micro signals about the emotional states and intentions of others.

However, this function does not work so well when we learn to hide emotions and add social status and appearance to the messages. We become lost in the maze of signals, and because of this we begin to focus on one news channel - most often on words. Our attention is not very divisible, so we usually lose sight of signals flowing from the body.

FACTS ABOUT LIE DETECTION



Since the 1960s, scientists and specialists have been trying to answer the question - can you detect a lie by observing non-verbal messages? Unfortunately, the answer is inconclusive and may not be positive, but it does not mean that we are completely helpless and devoid of tools. There are certain behavioral patterns, language schemes, and types of lying and manipulation that are worth knowing. Our accuracy rate in detecting lies will never be 100%, while 70-80% may be very satisfying for us.

FACT

The results of scientific research on the subject of lying detection will always be somewhat different from the experience and knowledge of people who question and verify truthfulness on a daily basis. Why? Behavior and catching a liar in a laboratory experiment is different from detecting cheating in real-life situations. A special reason is the much lower rate which is the consequence you have to suffer.

FACT

In situations where there is no verifiable information, people rely more on non-verbal behavior than on the content of a statement to discover if someone is lying.

FACT

There are at least four reasons why it is more difficult to control non-verbal behavior than verbal one:

- a) We are more trained to use words than to manage our behaviour
- b) Because words in the context of information exchange are more important than behavior, people pay more attention to what they say than how they behave.
- c) People cannot remain silent. Even if they do nothing, they keep their poker face which also gives some information. We always present some behavior.
- d) There are some automatic connections between emotions and non-verbal behavior. However, there are no automatic connections between emotions and words or sentences.

FACT

Introverts, shy and socially withdrawn people look less credible.

The impression of tension, nervousness and anxiety, which are natural features here, are interpreted by observers as indicators of cheating.

FACT

There are 3 ways of detecting lies

1. Observation of non-verbal behavior - body language, face language, voice.
2. Verbal analysis - analysis of the content of speech and writing.
3. Examination of physiological reactions during lying - pressure, pulse, sweating

The analysis of non-verbal behavior alone seems ineffective, but if we add verbal analysis (linguistic analysis of the text) to it, lie detection increases by up to 20%.

Examination of physiological reactions requires the use of a polygraph or other sensory devices, which is rarely possible in everyday life.

FACT

More expressive people are liked more and make a better first impression in a new environment. This applies in particular to communication using facial expressions. People who send clear non-verbal signals are more reliable to our brain - if we can not read others' emotions quickly, we are afraid that such a person may hide something from us.

MYTHS ABOUT LYING DETECTION

In this section I focus on eight myths that are worth explaining.



MYTH

Fraud is associated with a unique pattern of specific behavior.

Well, it is not.

Pinocchio's nose does not exist. There is no such a thing as typical dishonest behaviour or a set of gestures and mines that will work with every liar. However, it is more likely that one type of behavior may occur when lying while others will not. These are worth knowing.

MYTH

All people present inconsistent non-verbal behavior while lying.

Not always and not everyone.

The likelihood of signs of cheating only occurs when emotions (fear, guilt, excitement) are involved, or when a lie requires some intellectual effort.

If these two conditions are not met, one can lie with no symptoms. Behavioral signs of cheating are different in situations where the stakes are high (I can lose a lot) and others when the stakes are low (I am not in danger if I lie).

MYTH

Liars are nervous

It is unlikely that experienced criminals, psychopaths or public figures such as politicians, for whom making a good impression on others is very important will show their nervousness when they lie. In that case, practice makes perfect.

This does not mean that liars never behave nervously. Stress and discomfort shown in the form of looking away, fidgeting, touching one's face, rubbing a nose or smiling, may be easily misinterpreted as signs of lying.

MYTH

Liars look away

Liars being interrogated look away as often as people who tell the truth. In our culture, however, it is established that honest people look straight into the eyes and insincerely ones look down. Possibly, we do harm a lot those children who are shy or introverted because of that superstition.

MYTH

Psychologists and police officers are better in detecting lies.

Unfortunately, according to the research, it is not true. Only people who undergo professional training showed a large higher rate than ~ 50% detection rate.

Prisoners proved to be the best group in reading non-verbal indicators of lies. It probably results from the fact that achieving success in the criminal world and adapting to it depends, in part, on the ability to recognize whether you are being lied to.

MYTH

Women are better at detecting lies.

No, but ...

Women are better in reading nonverbal behavior of other people, especially when it comes to the ability to notice and read facial expressions. However, according to research, women are less suspicious than men and more often think that someone is telling the truth. So they recognize nonverbal behavior better in truthful people than in those who try to hide something.

MYTH

Emotions are culturally universal, so non-verbal behavior is too.

Unfortunately not. Some basic emotions can be felt universally around the world, while non-verbal behavior is culturally conditioned. The fact that basic emotions such as joy, anger, fear, disgust, surprise, sadness can be universal for all cultures (felt the same) does not mean that they will be shown the same way in non-verbal communication in every culture.

Therefore, it is more difficult to detect a lie when a liar and interrogators are of different ethnic origin.

This has been proven many times by American studies which have shown that e.g. typical (normal) behavior of black skinned people corresponds to the behavior which gives white observers a suspicious impression.

For example, black suspects make white police officers more suspicious than white suspects, whether they tell the truth or lie. This is called **cross-cultural non-verbal communication error**.

MYTH

Rule 7% -38% -55% in communication

The myth of Mehrabian, saying that among the information we receive, spoken words account for only 7% of communication, 38% for voice and 55% for body language.

This result concerned one specific experiment carried out on a very limited set of students. However, this is not a universal principle. The study was to show what we pay attention to when the message is inconsistent, ambivalent.

In a situation where our silhouette or face communicate something different than what we say - we tend to pay more attention to non-verbal communication. For example, when a speaker standing on a stage has a curled figure and a shaky voice, we will not trust his words when he says he is relaxed and confident.

Non-verbal communication, i.e. body language, facial expressions and voice, gives us - depending on the situation and the person providing the information - from 10 to 90 percent of information. It all depends on the context.

Nevertheless, non-verbal communication accompanies us every second of interpersonal interaction.

SUMMARY - MY EXPERIENCE

Summing up, it can be easily seen how dangerous myth, concerning lie detection, is a belief that there are universal meanings of individual gestures –out of context, culture or norms of behavior.

In a body language reading, CHANGES are the most important, i.e. deviations from a person's usual patterns of behavior. Most behavioral indicators appear just after asking a question. A good question!

Over the last few years of my work, I have recorded and analyzed thousands of videos with both liars and those who were telling the truth. Those were people who trained profiling as a hobby and used their knowledge in business, as well as employees and officers of various services, including Polish and foreign ones. Some situations were directed, others related to real auditions and life situations. Together with the team, we were looking for patterns of behavior that would be repeatable and would become a reliable indicator of suspicious behavior.

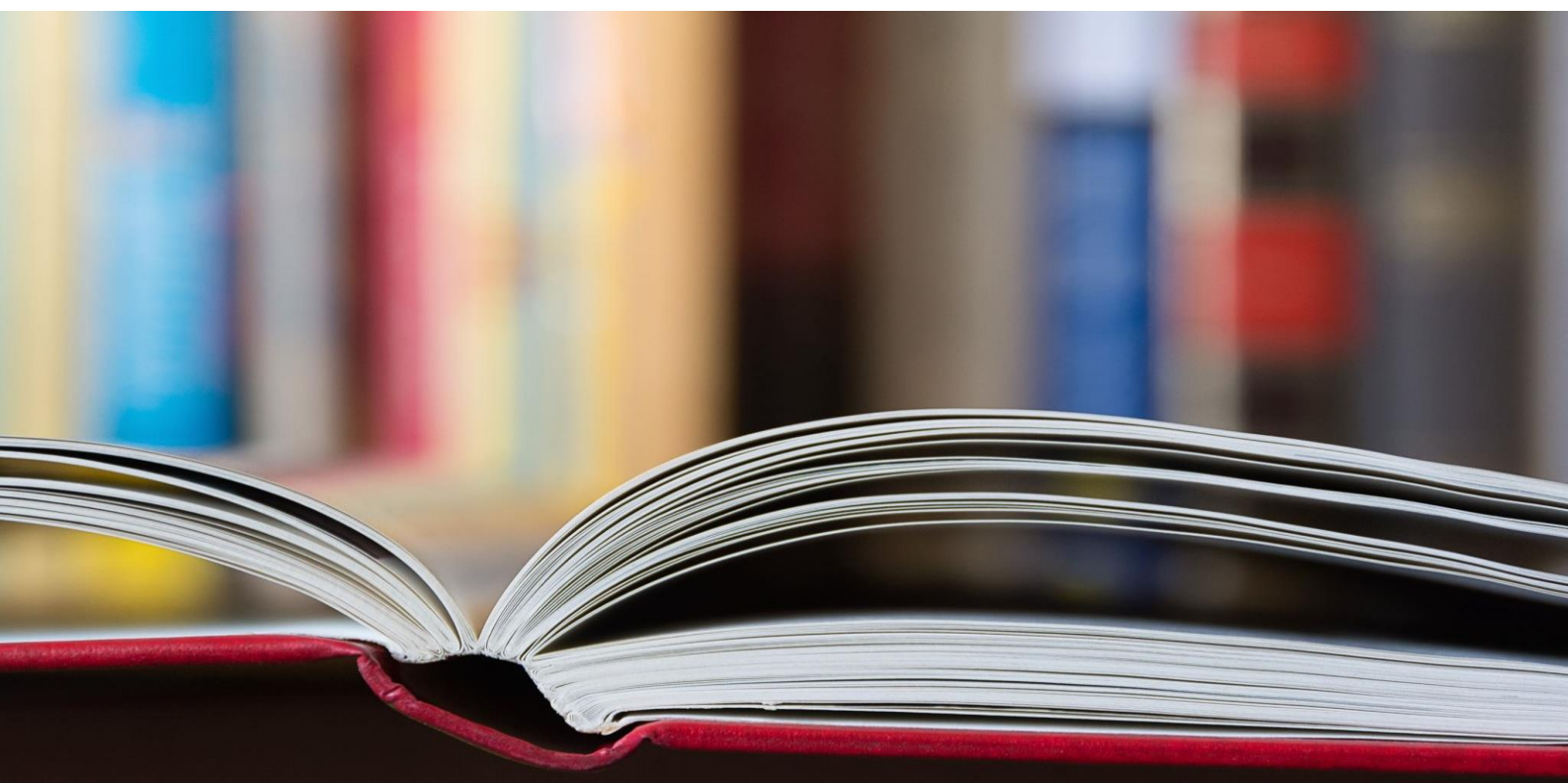
What's more, we had various biosensory technologies to help, such as measuring facial expressions, pulse, skin galvanic reactions and eye tracking. We tested the latest "lie detectors", which were based on machine learning and artificial intelligence. They were all used to select patterns based on a huge amount of data - which a human is not able to analyze himself.

In a group of trained people, only a few had above average reading ability. We can call it intuition, instinct or experience. Among them were both civilians and trained service employees, women and men of all ages, from different cultures.

SUMMARY

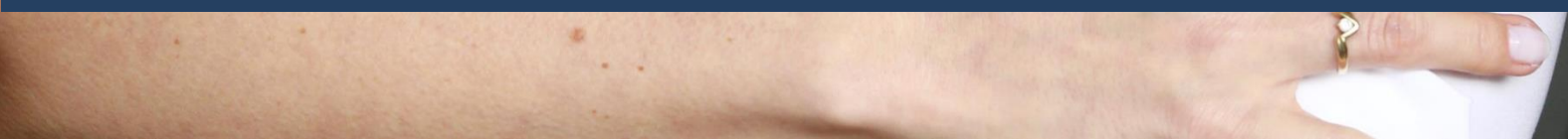
To list my observations and experiences, I started preparing a publication - book that will present **only those behavioral and linguistic indicators that have proved effective and helpful in detecting lies.**

My goal is to prepare a list of specific indicators **that can be used at home, at work or on duty** - without the need to learn hundreds of gestures and facial expressions. This method has helped me to increase the detection of dangerous and suspicious behavior at European airports. I hope that it could be also helpful for you.





ABOUT THE AUTHOR
DIANA NOWEK



WHO I AM?

- ✓ A behavioral profiler and trainer of the European Predictive border profiling specialists course for border services of the European Frontex Agency (European Border and Coast Guard Agency).
- ✓ A co-author of trainings on detection of dangerous behavior at airports and border crossing points, an author of the guide: *Manual for border related behavior recognition*. Probably the only Polish woman training EU services in the field of behavioral analysis and interpretation of inconsistent behavior. In addition to Frontex, UN agencies also use my services.
- ✓ In cooperation with the European Asylum Support Office (EASO), International Organization for Migration (IOM) and the UN Refugee Agency (UNHCR), I ran the cycle "European Course for Advanced Profiles Trainers" in the Balkans and Turkey.
- ✓ A competence trainer - I conduct trainings for companies and public institutions. Together with former service officers, we offer the most comprehensive training in behavioral analysis in Poland. We review and analyze the credibility of testimonies.
- ✓ A founder of the Institute of Non-Verbal Communication (currently the Institute of Non-verbal Communication) and the author of training programs
- ✓ I live in Vienna, Austria.

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