

Truth Verification

- Certified Voice Stress Analysis vs. Polygraph
 - Discussion?
- Timing
 - Pre-COE vs. Post-COE
- Pre-COE Pros:
 - Saves hours of Background Investigation time
- Post-COE Pros:
 - No limitations on what can be asked, i.e., addictions, treatment and frequency of drug and alcohol use

We could've piled up a hundred years of great policemen and great detectives: men with honor and brains and guts.

You tore down every best part of them. The people who read it in the papers, they're going to overlook the fact that WE got you;

that we washed our own laundry and we cleared this thing up.

They're going to overlook all the good. They'll overlook every last good cop in the country.

But they'll remember YOU.

Because you're a bad cop... Joe Friday (Dragnet)

The State of Washington



Proclamation

WHEREAS, Washington is committed to ensuring the safety and security of everyone residing in and visiting our state; and

WHEREAS, Washington's public safety personnel from city, county, state, federal, and military agencies are critical to keeping our communities safe; and

WHEREAS, from answering the call for help to offering services that bring relief and comfort during the worst of circumstances, as well as ensuring Washingtonians are safe and secure, the public safety community is always readily available; and

WHEREAS, Washington's public safety personnel are the first to respond to an emergency situation, frequently going beyond their regular duties in their mission to serve and protect; and

WHEREAS, our public safety personnel are dedicated to reducing the occurrence of crime, fires, and injuries through prevention and protection education; and

WHEREAS, Washington's public safety agencies work collaboratively to safeguard life and property, protect our residents and stand up for the most vulnerable, even in the face of personal harm; and

WHEREAS, the duties, responsibilities, hazards, and sacrifices facing the public safety community on a daily basis earn them the respect, admiration, and gratitude of those they serve and protect;

NOW, THEREFORE, I, Jay Inslee, Governor of the state of Washington, do hereby proclaim the week of August 30 – September 6, 2015 as

Stand With Those Who Serve Week

in Washington, and I urge all people in our state to join me in this special observance.

Signed this 26th day of June, 2015

Governor Jay Inslee



Truth Verification

*“Excellent training can’t
prevail over poor selection”*

-Jordan Ferguson

Rule #4

**We don't pay
attention to
boring things**



**After 10 minutes,
audience attention
steadily drops.**



POLYGRAPH

The Polygraph should be regarded as a decision-support tool intended to add incremental validity to risk-assessment and risk-management efforts surrounding the evaluation and selection of law-enforcement and other public-service applicants.

POLYGRAPH

GOALS OF THE POLYGRAPH

- 1. Disclosure**
- 2. Deterrence**
- 3. Detection**

VIDEO

POLYGRAPH

Federal Perspective

There are 26 government polygraph programs right now, with nearly 700 polygraph examiners. They have missions ranging from Presidential protection, fraud investigation, counterintelligence vetting, applicant screening, drug and food tampering cases and criminal cases. They are required to use validated testing techniques and their cases always undergo independent Quality Control.

POLYGRAPH

PSA vs. DREs

POLYGRAPH

Crewson

Table 6
Rank Ordered "Combined Accuracy" on Common Medical and Psychological Diseases.

Target Condition	Technique	Average Accuracy		Combined Accuracy	Number of Studies
		Sensitivity (TPR)	Specificity (TNR)		
Acute Appendicitis	CT	0.95	0.98	0.96	5
Brain Tumor	MRI	0.93	0.98	0.95	2
Carotid Artery Disease	US	0.89	0.93	0.91	14
Acute Appendicitis	US	0.84	0.97	0.91	2
Breast Cancer	US	0.92	0.87	0.90	3
Deception	Polygraph	0.92	0.83	0.88	37
Breast Cancer	MRI	0.98	0.74	0.86	3
Breast Cancer (screen)	Plain Film	0.79	0.92	0.86	4
Multiple Sclerosis	MRI	0.73	0.93	0.83	2
Breast Cancer	Plain Film	0.78	0.83	0.80	7
Alcohol Abuse (screen)	MAST*	0.80	0.78	0.79	4
Deception (screen)	Polygraph	0.59	0.90	0.74	2
Personality Disorders	DSM-IV**	0.84	0.60	0.72	3
Depression	MMPI	0.68	0.65	0.67	25

*Also included a study using MMPI

**Also included studies using ICD-10 and a Personality Index

Table 7
Rank Ordered "Combined Accuracy" of Diagnostic and Screening Tools.

Evaluation Tool	Average Accuracy		Combined Accuracy	Number of Studies
	Sensitivity (TPR)	Specificity (TNR)		
Polygraph	0.92	0.83	0.88	37
MRI	0.86	0.88	0.87	17
CT	0.83	0.89	0.86	19
US	0.84	0.87	0.86	38
Plain Film	0.77	0.85	0.81	12
MAST (screening)	0.64	0.92	0.78	3
Polygraph (screening)	0.59	0.90	0.74	2
DSM-IV	0.72	0.68	0.70	1
MMPI	0.68	0.65	0.67	17
MMPI (screening)	0.70	0.53	0.61	5

POLYGRAPH

Table 2
Summary of Common Terms Used and Not Used in this Study.

<u>Terms Used</u>	<u>Definition</u>	<u>Also Known As</u>
Sensitivity (Se)	The proportion of diseased cases with a positive test. (perfect accuracy = 1.0)	True Positive Rate (TPR)
Specificity (Sp)	The proportion of non-diseased cases with a negative test. (perfect accuracy = 1.0)	True Negative Rate (TNR)
Total Accuracy	$(Se+Sp)/2$ (perfect accuracy = 1.0)	Lykken's formula
Percent Agreement	The proportion of all readings conducted by two readers in which their interpretations agreed.	
Kappa (k)	Coefficient representing agreement obtained between two readers beyond chance. A value of 1 represents perfect agreement. A value of 0 represents no agreement.	
<u>Terms Not Used</u>	<u>Definition</u>	<u>Also Known As</u>
False Positive Rate	The proportion of non-diseased cases with a positive test. (perfect accuracy = 0.0)	1-Specificity
False Negative Rate	The proportion of diseased cases with a negative test. (perfect accuracy = 0.0)	1-Sensitivity
Total Accuracy	# of correct interpretations + # of total interpretations	

POLYGRAPH

Probability Analysis

Candidates are either truthful or deceptive
about their disqualifications

Uninformed decision makes it 50/50

or

Chance

1000 Applicants

500 Truthful

500 Deceptive

Using chance 250 Truthful applicants will be called Deceptive and 250 Deceptive applicants will be called Truthful.

Using a polygraph test that is 90% accurate

Only 50 Truthful applicants will be called deceptive and 50 Deceptive applicants will be called truthful.

POLYGRAPH

QUICK COMPARISON

Oregon population 3,871,859

Washington population 6,830,038

(US Census Bureau)

Police Officers

Oregon – 1.6 per 1,000 people

Washington – 1.5 per 1,000 people

(www.indicatorsnorthwest.org)

POLYGRAPH

Oregon has 6194 officers

Washington has 10245 officers

Polygraph

2011 Statistics

Oregon revoked the certifications of 122 officers

Washington revoked the certifications of 12 officers

Oregon does not allow pre-employment polygraphs

Polygraph

Single Issue Polygraph

One issue (one target)

Several opportunities

Polygraph

- Does your examiner adhere to EPPA, EEOC, ADA and State Law?
- Did your examiner graduate and pass an internship from an approved school?
- Does your examiner belong to a professional association? (Preferably one with standards and codes of conduct)
- Is your examiner's training up to date?
- Does your examiner use a validated technique?

Polygraph

- Is the examination conducted in a suitable environment?
- Is your examiner's equipment up to standards?
- Does your examiner participate in Quality Control?

Questions?

Jordan Ferguson

509.993.6826

mferguson@spokanepolice.org

Empirepolygraph@gmail.com



Corporal M. Jordan Ferguson has over 28 years of law enforcement experience. Jordan joined the Milpitas California Police Department in 1985. During his time with Milpitas he was a Field Training Officer, Accident Reconstructionist and Auto Theft Investigator. In 1991 Jordan joined the Idaho State Police for several years before becoming the Chief Criminal Investigator for the Kootenai County Prosecutor's Office in Coeur D Alene, ID. He stayed with the prosecutor's office until he was hired by the Spokane Police Department in 1999. Jordan has worked in patrol and traffic; he was an FTO and part of the Neighborhood Resource Officer division. He has attended CIT (Crisis Intervention Training) and was one of the Spokane Police Officers that attended ECIT (Enhanced Crisis Intervention Training). He currently works patrol with collateral duties as a PIO (Public Information Officer).

Jordan became a polygraph examiner in 2003 which started his interest in background investigations. In 2009 Jordan became the lead background investigator and was tasked with ensuring the hiring process matched best practices across the country. Jordan has earned the title of Certified Forensic Law Enforcement Polygraph Examiner from the American Association of Police Polygraphists. He is also a certified PCSOT (Post Conviction Sex Offender Treatment) polygraph examiner and a full member of the American Polygraph Association.

Jordan earned his BS from Lewis and Clark State College and has completed his coursework for his MA in Criminal Justice from Washington State University, Spokane. He has been able to focus on the Neuroscience aspect of police work while studying under Dr. Bryan Vila and assisting the S.H.O.T. (Simulated Hazardous Occupational Tasks) Lab, part of the Sleep and Performance Research Center. Jordan is focusing his research on the relationship of fear to in custody death. Jordan expects to graduate in 2014.

Jordan teaches Background Investigations to law enforcement agencies across the country. He has given presentations on Polygraph and the Neuroscience of Ethics