

# Suitability for Polygraph Testing

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# Suitability and Un-suitability for Polygraph Testing

Nobody realizes that some people expend  
tremendous energy merely to be normal  
- Albert Camus

Normal is nothing more than a cycle on a washing  
machine  
- Whoopi Goldberg

# Endogenous Factors

“The review would include what is known about the effects of medications, sleep deprivation, and illnesses on the physiological responses measured...” [p.27]

(National Academy of Sciences, 2003)

# Endogenous Factors

- Health
- Medications
- Personality
- Mental Status
- Developmental Issues

# Suitability for Polygraph Testing

- Chronological Age of at least 14 years
  - 12-13 year old youths may also be tested
- Functional Age Equivalency (FAE) or Standard Age Score (SAS) of at least 12 years
  - Functional maturity more important than age
- Capacity for abstract thinking
- Capacity for insight
- Capacity to understand right from wrong
- Ability to tell truth from lies
- Ability to anticipate rewards and consequences for behavior
- Consistent orientation to date, time, place.

# Why Age 12?

- Ceci, Toglia & Ross (1987) Haugaard, Repucci, Laird, & Naulful (1991) found children determine that saying something untrue to a police officer was lying, even when instructed by parents to make such statements
- Abrams (1975, 1989), found children under age 11 do not make good polygraph subjects
  - Other studies report similar findings
- Abrams (1974) reported unreliable results with adults of below borderline intelligence
  - Adults with IQ scores of 70 have FAE/SAS scores of 12 years
- Executive functioning abilities begin to fully mature at age 12 (Anderson, 1998; Welsh, Pennington, and Groisser 1991)

# Why age 14?

- All 12 year-olds are not the same
  - Social maturity
  - Intelligence
  - Learning disorders
  - Impulsive or disruptive behavior disorders
  - Developmental disorders
  - Trauma
- A referral policy based on age 14 will better ensure the suitability of juvenile examinees
- 12 year old children can be tested if they possess the functional maturity of an average 12 year-old

# Un-Suitability for Polygraph Testing

- Diagnosis of psychotic condition (DSM IV-TR), serious mental disorder, psychiatric disorganization/disorientation, or lack of contact with reality (Abrams, 1973, 1974; Flock, 1950; Heckel, Brokaw, Salzberg & Wiggins, 1962)
- DSM IV-TR Axis I severity specifier of “severe” for any diagnosis
- Presence of acute pain or illness
- Presence of acute distress
- Recent medication changes
- Mean Age Equivalency (MAE) or Standard Age Score (SAS) under 12 years



# Professional Ethics

- Not all persons are equally suitable – some people are less suitable for polygraph testing than others
  - There is no single test or single intervention that applies universally to all persons
  - There is no such thing as a PANACEA
- Examiners should not conduct tests on unsuitable persons
- Examiners should not issue unqualified opinions on marginal test data from marginally suitable subjects
- Examiners should alert referring agents to issues indicating marginal suitability or unsuitability for polygraph testing
- Examiners should alert referring agents to issues that compromise or qualify the test results

# Endogenous Factors

- There is no published research or theoretical rationale suggesting that any endogenous factors would cause erroneous polygraph examination results.
- Data quality limitations may increase the likelihood of inconclusive findings
- “For such conditions to threaten the validity of the test, they would have to differentially affect responsiveness to relevant and comparison questions (e.g., by reducing a guilty examinee’s responsiveness to relevant questions.)” [p.86]  
(National Academy of Sciences, 2003)

# Testing 101 - Normative Data

- **Normative Data** applies to **normal** persons from the intended sample or population
- **Caution** when applying normative data to **exceptional** individuals or known outliers (persons whose functional characteristics lie outside the normal distribution)
  - medical health concerns
  - serious mental health problems
  - multiple medications
  - developmental disorders
- **Caution** when applying normative data to individuals from **other/un-researched populations**

# Personality

“We have not seen persuasive scientific arguments that any specific personality variable would influence polygraph accuracy. If such effects were found to exist, however, it would be possible in principle to use information on the personality variable to adjust polygraph test scores.” [p.86]

(National Academy of Sciences, 2003)

# Endogenous Factors - PCSOT

Given the elevated prevalence of mental health disorders, among some populations of juvenile and adult sex offenders, extra consideration should be given to issues pertaining to suitability for polygraph testing

# Medications

- Side Effects
  - Drowsiness
  - Irritability
  - Decreased libido
- Data Quality Effects
  - Dampening of physiological response data
  - Exaggeration of physiological response data
  - Unpredictable effects
- Physiological Side-Effects
  - ***Sympathomimetic*** effects
  - ***Anti-cholinergic*** effects
  - ***Corticosteroid*** effects (asthma inhalers)
  - ***Extrapyramidal*** effects
  - ***Postural Hypotension effects***

# Medications – Take Home Points

- Use of medications is common – single medications indicate no concern to the polygraph
- Persons who function optimally on meds will likely test optimally on meds
- No published research or theoretical rationale suggests any medications will cause erroneous polygraph results
- Data quality problems may cause inconclusive results
- Use caution when interpreting test results for persons taking multiple medications
- Use caution when responding to test results for any person who meet legal criterion for an exceptionality
  - Diagnosed disability, 504, ADA, IDEA/IDEIA

# Goals of Testing

- Disclosure of information
- Deterrence of problems
- Detection of involvement or non-involvement



# Pregnancy

- Data from pregnant examinees are indistinguishable from data obtained from non-pregnant persons
- Pregnancy is not a disease
- Pregnancy is not a disorder
- Pregnancy is *normal*
- **Know your agency policies**
- Obtain a written opinion from a doctor indicating that the pregnancy is normal
- Do not test women experiencing a high-risk or medically complicated pregnancy

# Professional Ethics

- Ethics is about right and wrong (good and bad)
- Questions of ethics ultimately involve what bad thing/s happen to whom
- Ethics are a matter of to whom we are obligated
  - Consequentialist/utilitarian ethics – criminal justice
  - Deontological ethics – clinical ethics
- Nothing bad happens to the community as a result of polygraph testing
- There are NO changes to a persons rights or liberties as a result of a polygraph test
- Polygraph testing is NOT traumatic

# Declarative Ethics

- Any of these alone is considered a sufficient ethical basis for a screening or investigative polygraph
  - Disclosure
  - Deterrence
  - Detection
- Diagnostic/evidentiary polygraph depend on the accuracy of the test result

# Marginal Subjects

- It *IS* ethical to conduct polygraph examinations on marginally suitable examinees for whom there is some expected benefit
  - Disclosure
  - Deterrence
  - Detection
- It *IS NOT* ethical to conduct polygraph examinations on un-suitable examinees
  - When there is a known problem that makes the examinee unsuitable
  - When there is no expected benefit
    - New information will not change a risk-assessment/management
    - Examinee lacks the capacity for economic forethought
    - Normative data cannot be used to calculate reliable estimates of accuracy (functional outliers to the normative data)

# Marginal Subjects

- Always render a qualified opinion regarding a marginally suitable examinee
- Marginal suitability + qualified opinion = do not take the case to court
  - Do not use the test result alone (as the sole basis) for any decision that affects the rights and liberties of the examinee

# Suitability – Take Home Points

- There is no single test that will work equally well with everyone
- Polygraph depends upon a psychologically normal (non-psychotic) person in reasonable physical health
- Normative data and normative decision models apply to normal persons
- There may be benefits from conducting polygraphs on marginal test candidates
  - Disclosure
  - Deterrence
  - No theoretical rationale to suggest erroneous results
  - Professional ethics dictates view results with caution