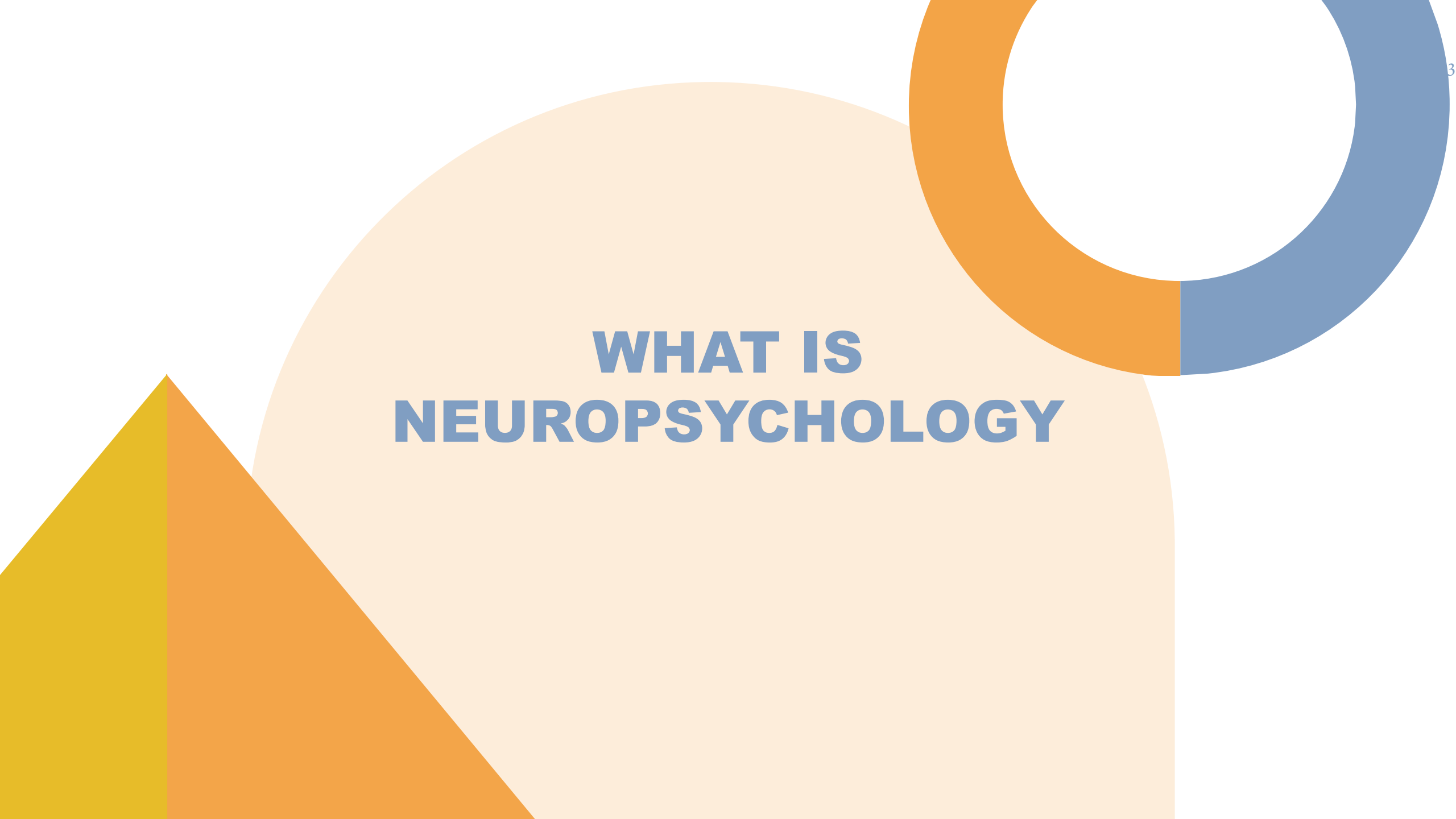


COGNITIVE IMPAIRMENT AND SEXUAL OFFENDING: NEUROPSYCHOLOGICAL EVALUATION

Emilie Picard, Ph.D.

AGENDA

1. What is neuropsychology (NP)?
2. How may cognitive impairment impact offending behavior?
3. What does a NP evaluation entail?
4. When to request a NP evaluation?



WHAT IS NEUROPSYCHOLOGY

WHAT IS NEUROPSYCHOLOGY

- The study of brain functioning and behavior
- The use of standardized tests to evaluate an individual's cognitive abilities, memory, attention, language skills, and executive functions.
- These assessments provide objective data that can help determine the presence of any cognitive impairments or brain dysfunction.



WHAT IS NEUROPSYCHOLOGY

Specialized training in:

- Clinical conditions that affect the central nervous system
- Neuroanatomy, neuropathology, and neurobiology
- Psychometrics
- Test administration and interpretation
- Ecological validity

TBI and Concussion (~50%)

Dementia

Epilepsy

Low IQ

Autism

Major Mental Illness

Substance Use

Strokes/tumors

Functional Disorders

Malingering

COGNITION CAN IMPACT LEGAL QUESTIONS...

CAPACITY

- To stand trial
- Proceed pro se
- Sentencing
- Execution

OTHER

- Restorability

MENS REA

- Criminal responsibility/sanity
- Diminished capacity

MITIGATION

- Pre-sentencing
- Risk assessment

...AND OFFENDING BEHAVIOR

The following can cause increased sex drive, disinhibition,
Change in sexual interests, and/or poor judgement

- Frontotemporal dementia
- Traumatic brain injury
- Huntington's disease
- Epilepsy
- Stroke
- Klüver-Bucy syndrome
- Alzheimer's disease
- Parkinson's disease
- Frontal lobe damage
- Brain tumors
- Encephalitis
- Infection
- Autism
- Low intellectual functioning
- Medication side effects

WHY ARE NPS NEEDED IN FORENSIC CONTEXTS?



Cognitive/neurological deficits, disorders, and sequelae are very common in the forensic population



TBI: 32% mod – severe TBI, 46% mTBI/concussion

Overall estimates: 25-87%, General population: 8.5%

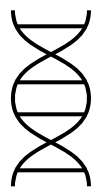


ID: 10% ish (0.8-19%) Autism: 4-5%ish (10% <age 25)



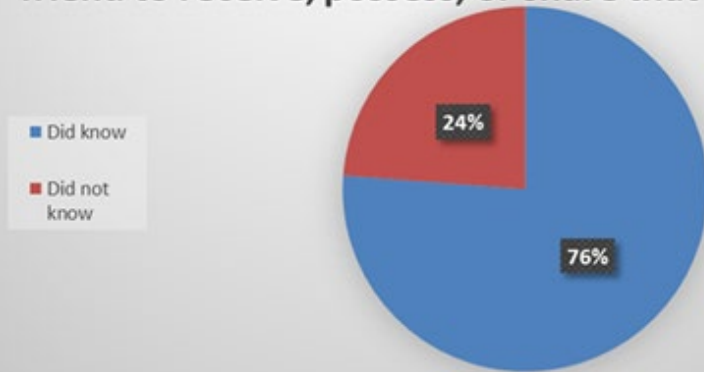
Men, lower SES, lower education, and ethnic minorities are at higher likelihood for certain injuries (TBI), diseases (dementias), and/or chronic medical conditions

COMMON CONSIDERATIONS/ QUESTIONS

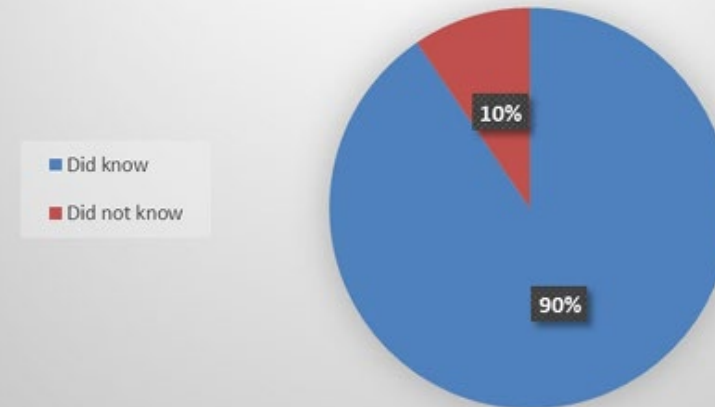


Low IQ	Autism	bvFTD	TBI	Drugs/Meds
• Unaware of laws • Interact with those at same IQ level • Unaware of stings/set ups • Younger kids • Ex: Talking to kids online that had same interest and wanting to date them	• Unaware of law/s social norms • Take online info literally • +/- IQ • Teens • Ex: concrete thought if CSAM available online, legal “barely legal”	• Frontotemporal dementia • Behavioral/personality change • Onset age 45-64 • Other compulsive/inappropriate behaviors • 15-22: 100,000 MA • Ex: CSAM, risky sites, trafficking	• Severe/moderate • Significant behavioral dysregulation (not just sexual) • Obvious cause/effect • Ex: Indecent exposure, groping, frotteurism	• Methamphetamine • Dopamine meds • Testosterone • Ex: on meth, having sex with anyone around, including teens, texting them, etc., looking CSAM (non-exclusively)

Did you know that even if a person under the age of 16 freely and voluntarily sends such a picture, even to a friend, it is considered a serious crime, punishable by long terms in prison, for that friend to receive, possess, or share that image?



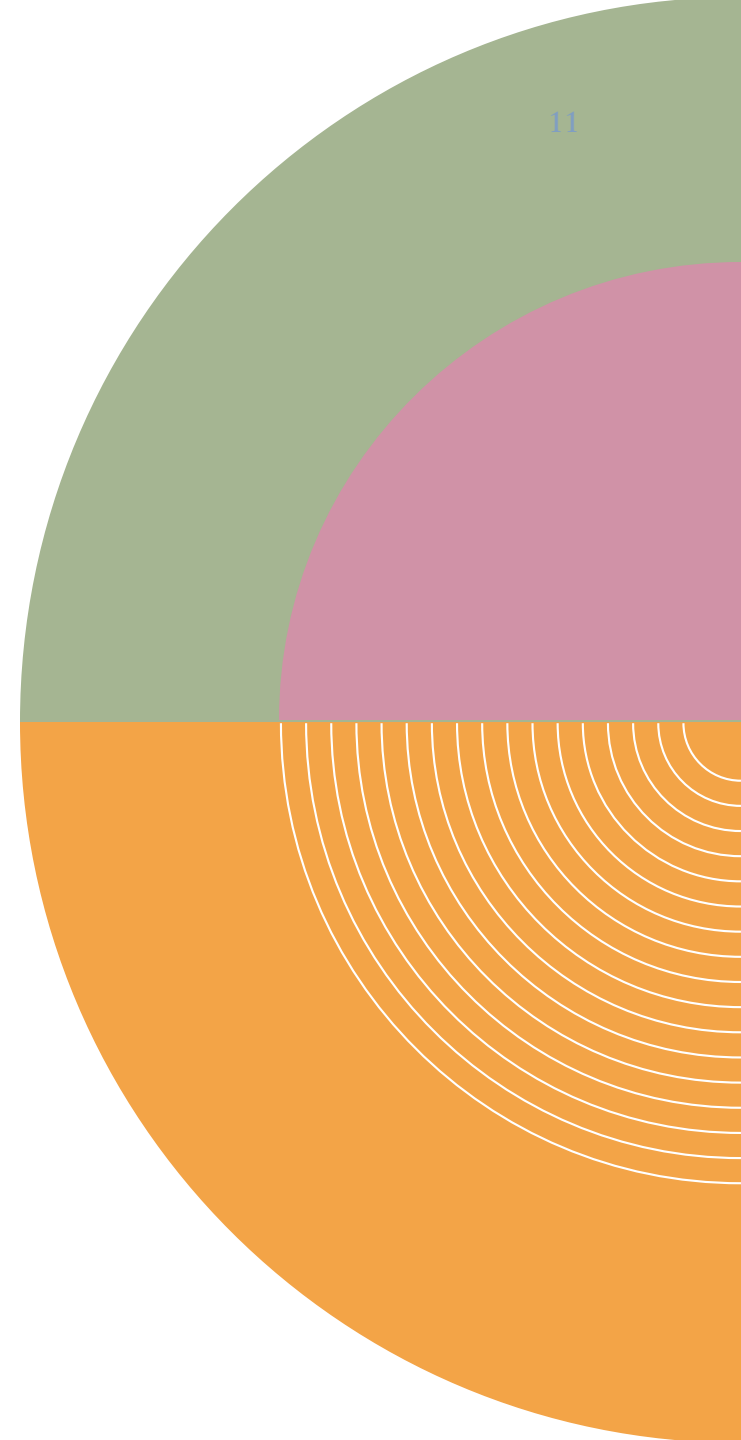
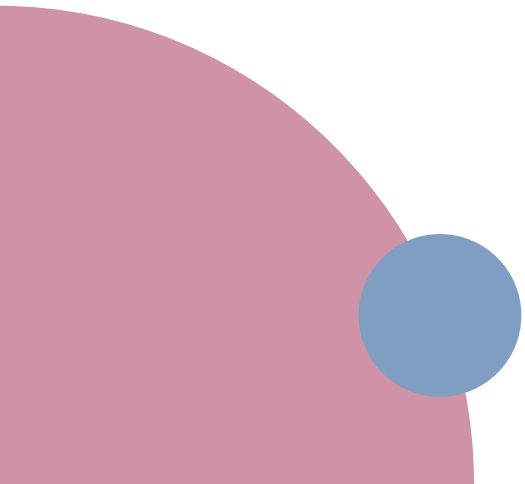
Did you know that it is regarded as a wrong, deviant, and criminal behavior, punishable by prison, for anyone to access child pornography on the internet, or to receive, possess, or share such images?



NAIVETÉ IN ASD

NP CAN ALSO HELP TO EXPLAIN PRESENTATIONS

- Prolonged substance use
- Malingering/feigning
- Learning disability
- Prolonged untreated mental illness



NP IS BECOMING MORE COMMONLY INTRODUCED IN COURT

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Neuroscience and behavioral genetics in US criminal law: an empirical analysis

Nita A. Farahany*

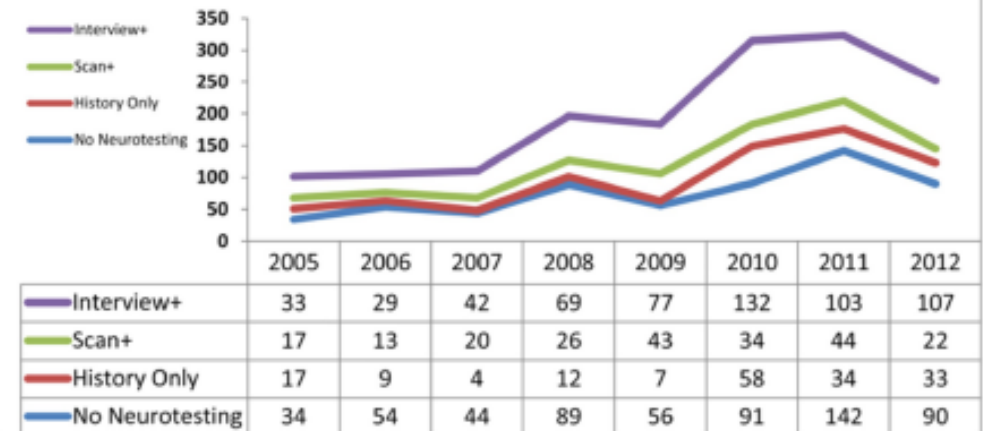


Journal of
Law and the Biosciences

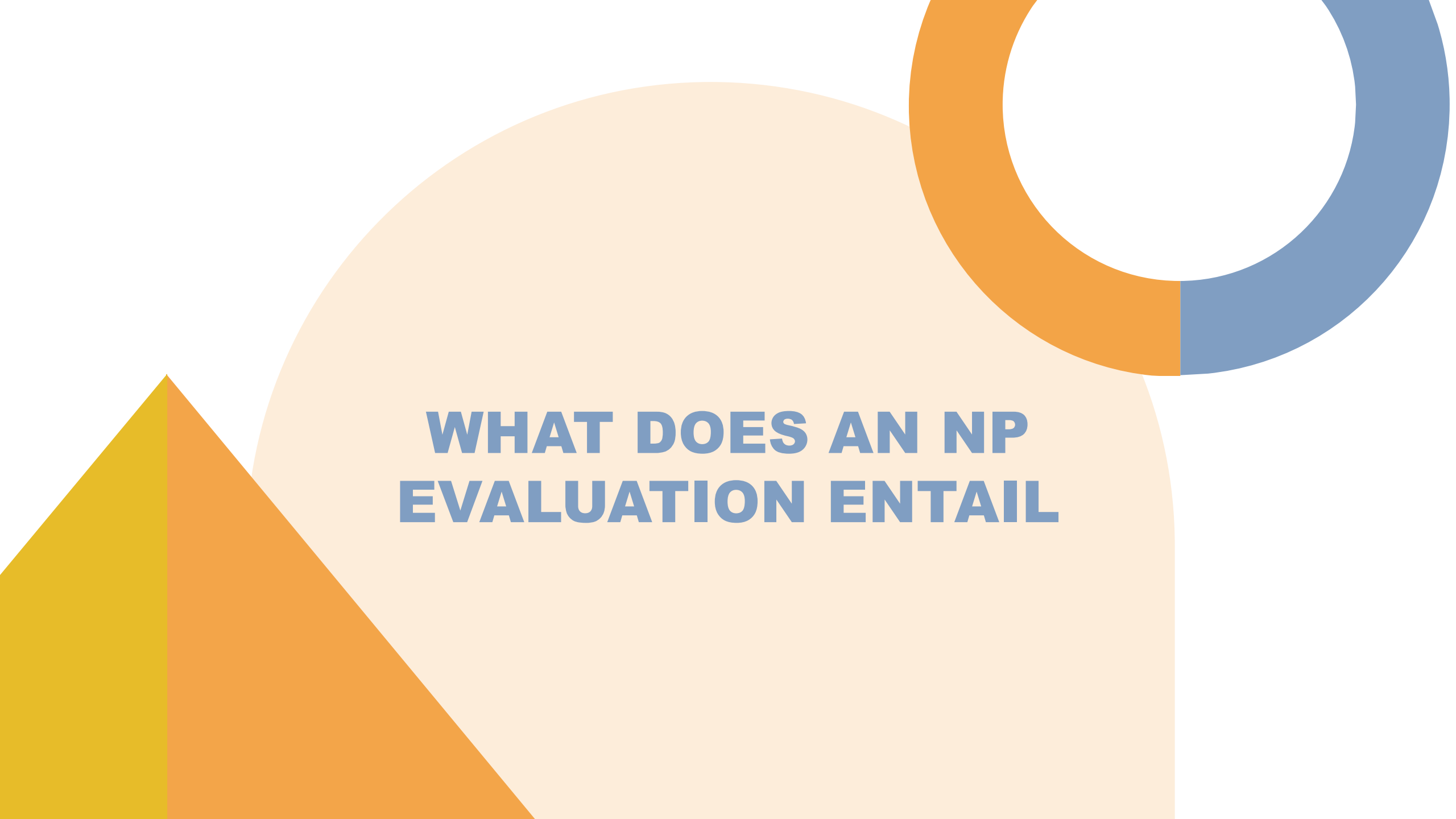
Duke
UNIVERSITY

HARVARD
LAW

Stanford
University



Graph 4. Neurological testing discussed in criminal opinions 2005–12. (The number of opinions per year in which each time of neurobiological testing is discussed. Interview+ = neuropsychological testing/evaluation, as well as medical or other history of head/brain trauma; Scan+ = some form of brain scanning evidence, neuropsychological testing/evaluation, as well as medical or other history of head/brain trauma; History only = medical or other history of head/brain trauma but no other form of testing discussed in opinion; No neurotesting = no discussion of any form of neurological testing introduced in opinion.) © Author, 2016. This image/content is not covered by the terms of the Creative Commons licence of this publication. For permission to reuse, please contact the rights holder.



WHAT DOES AN NP EVALUATION ENTAIL

NP EXAM

- Record review
- Clinical interview (approx. 2 hours)
- Testing (2-5 hours)
- Scoring of results (approx. 1-2 hours)
- Collateral contact
- Writing up results



Frontal Lobe

- Motor control (premotor cortex)
- Problem solving (prefrontal area)
- Speech production (Broca's area)

Parietal Lobe

- Touch perception (somatosensory cortex)
- Body orientation and sensory discrimination

Temporal Lobe

- Auditory processing (hearing)
- Language comprehension (Wernicke's area)
- Memory / information retrieval

Occipital Lobe

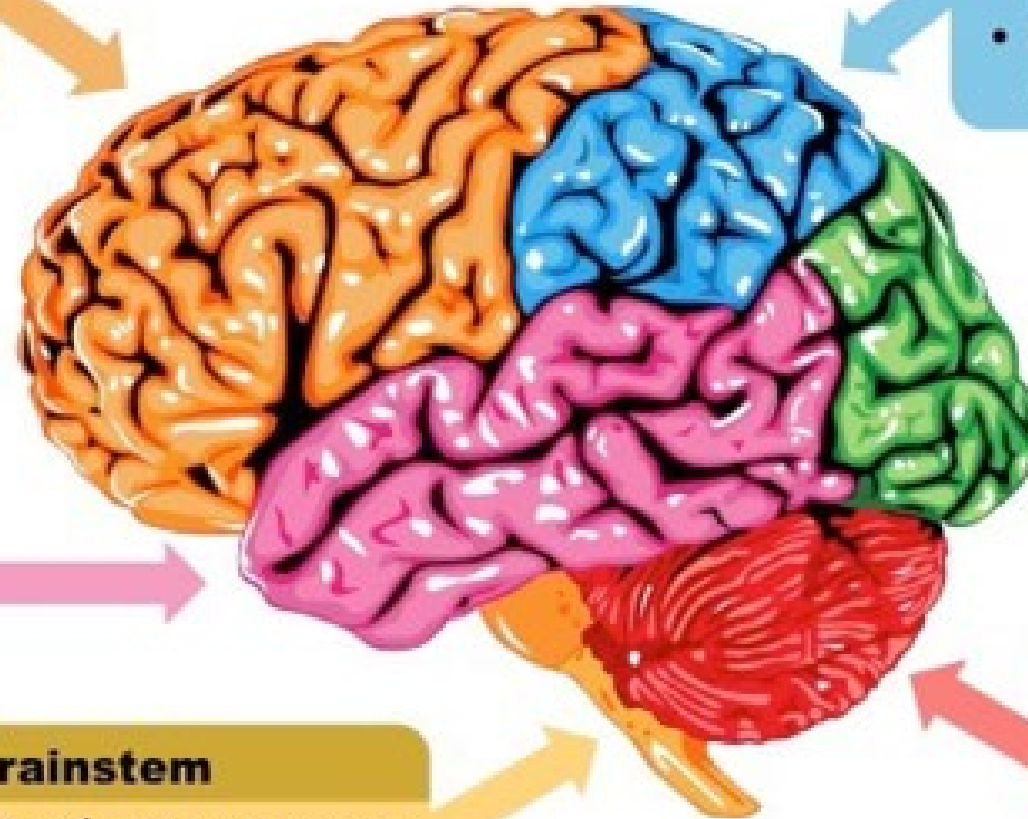
- Sight (visual cortex)
- Visual reception and visual interpretation

Brainstem

- Involuntary responses

Cerebellum

- Balance and coordination

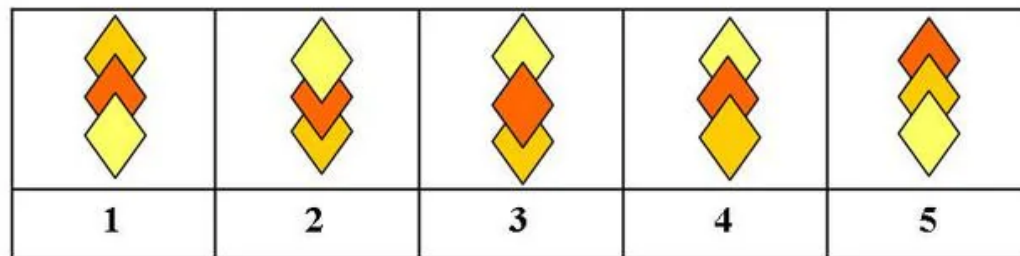
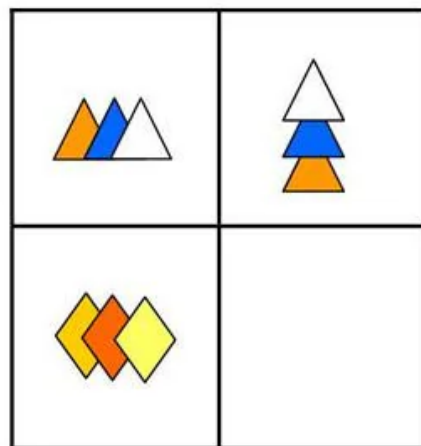


AREAS ASSESSED

- Premorbid/Baseline Functioning
- Intelligence
- Attention
- Processing speed
- Executive functions
- Learning and memory
- Language
- Visuospatial ability
- Sensory-motor functions
- Psychopathology and personality
- Academic*
- Social functioning*
- Validity

* As needed

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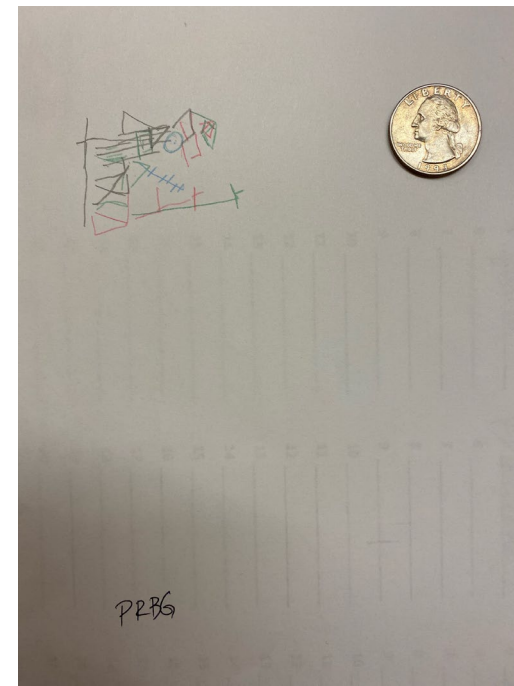
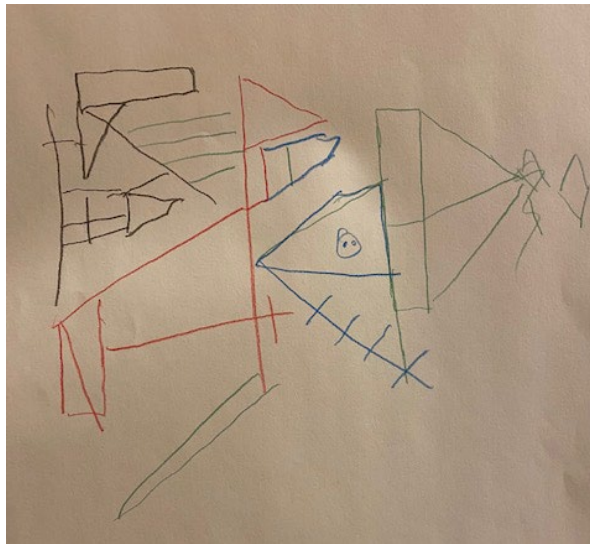
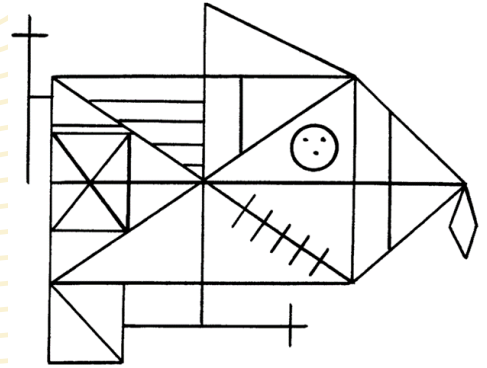




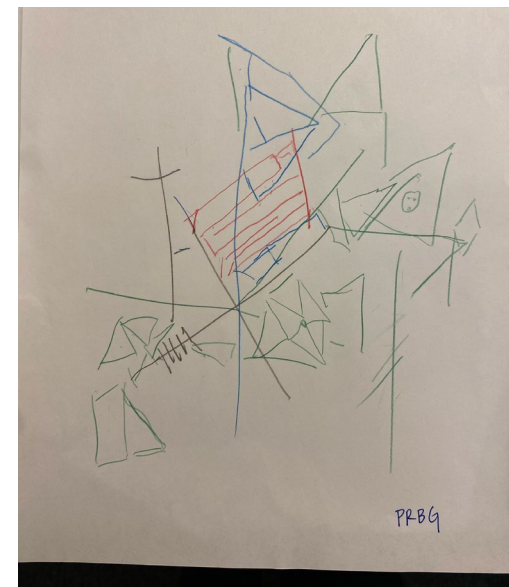
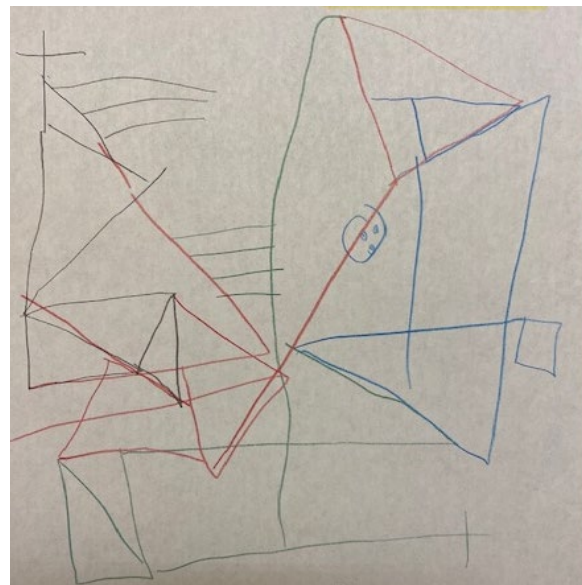
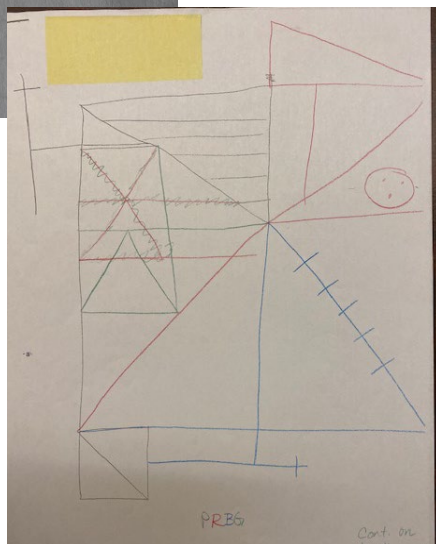
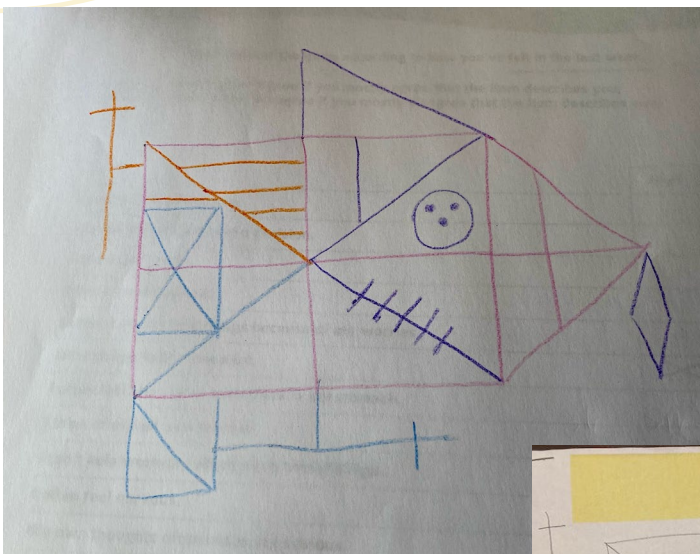
How are a clock and ruler alike?

Allow and restrict?

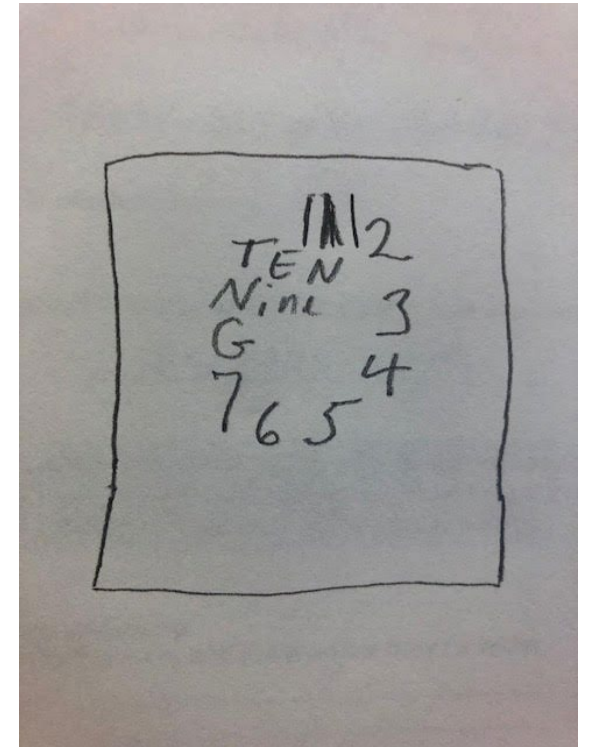
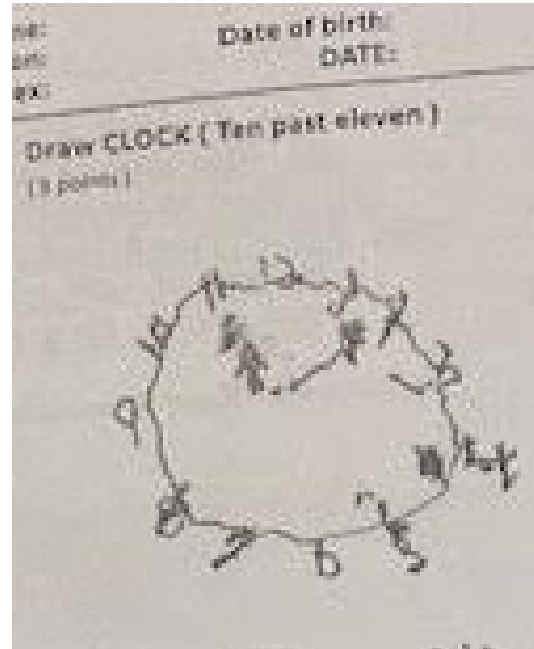
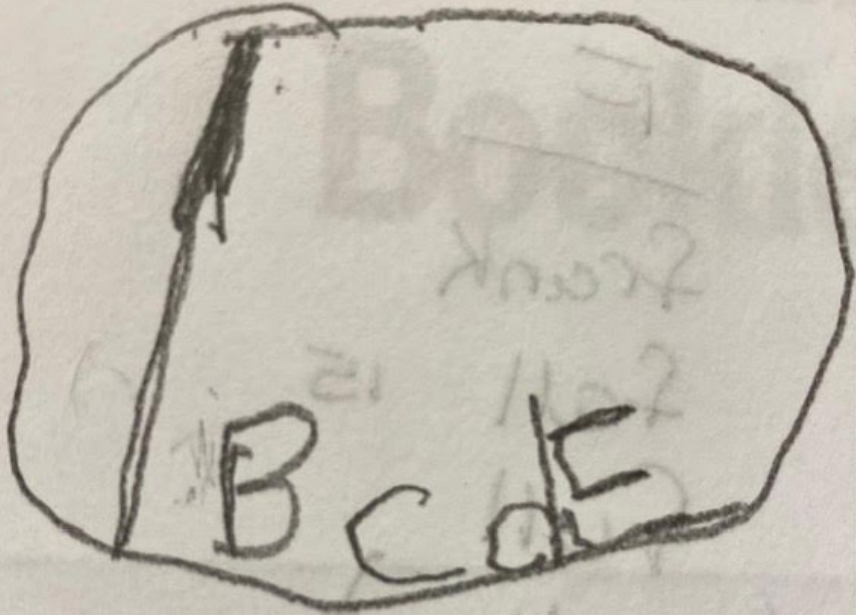


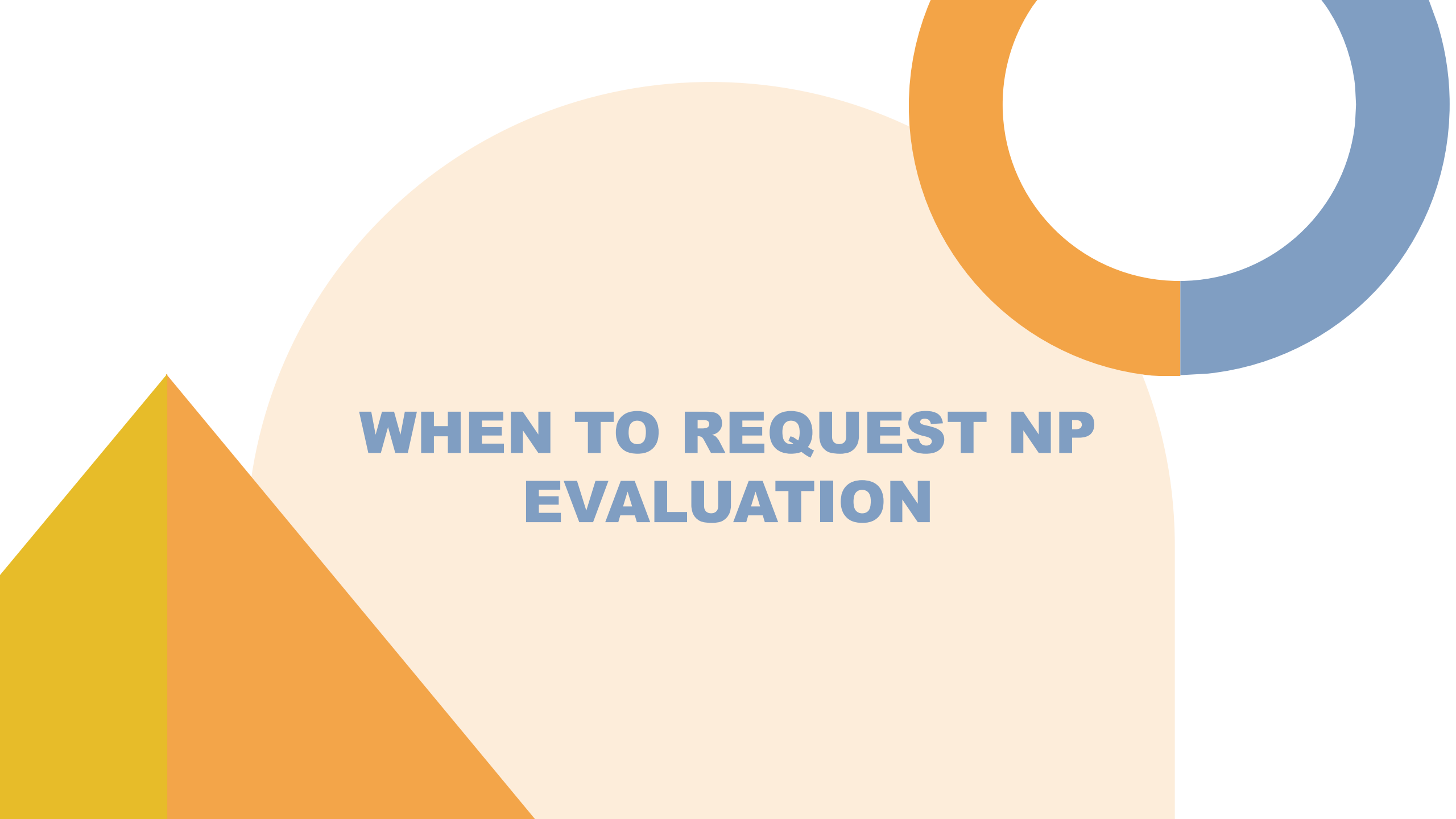


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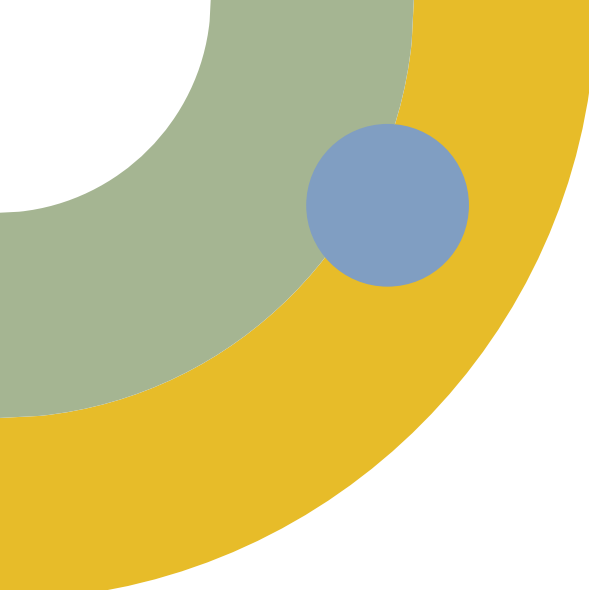


Draw CLOCK (Ten past eleven)
(3 points)





WHEN TO REQUEST NP EVALUATION



SITUATIONS TO REQUEST NP EVAL

- Moderate to severe TBI (*not* mild TBI/concussion)
- Low intellectual functioning (broadly <70's ish)
- Memory difficulty/dementia concern
- Drastic change in personality/sex drive or behavior
- New onset psychiatric symptoms such as paranoia, hallucinations, hypersexuality, later in life
- Particularly consider new arrests/odd behavior in older individuals
- Any known serious medical condition, and medication changes
- Stand alone versus incorporated into psychosexual

WHEN NOT TO REFER FOR TESTING

- Non-English speaking
- Significant physical limitations (such as ability to hold a pen)
- Hearing/vision difficulty
- Actively psychotic
- Unable to do a contact visit
- When there is a lot of available testing*

QUESTIONS?

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