The Role of Functional Impairment in Assessment and Treatment

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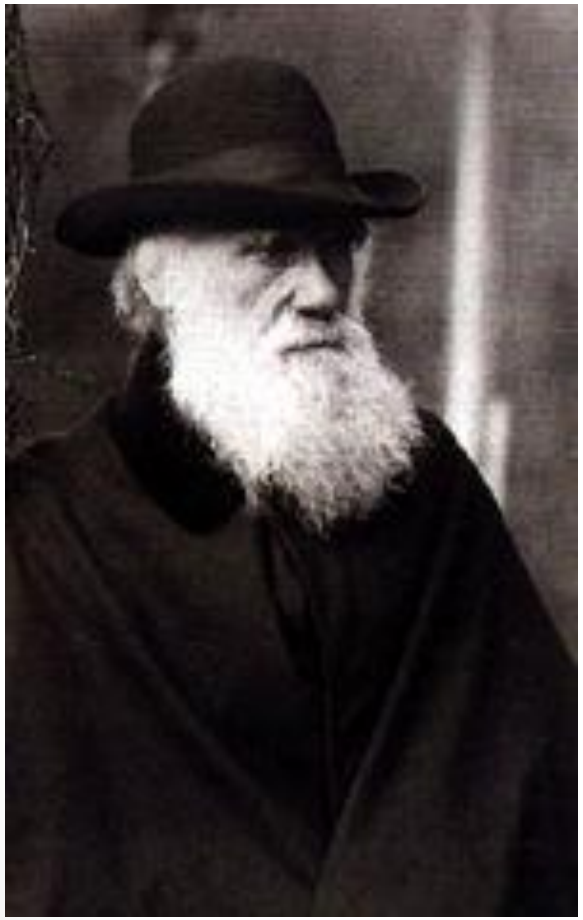
“You care for nothing but shooting, dogs and rat-catching, and you will be a disgrace to yourself and all your family.”

Who said this about his son?

The Answer:

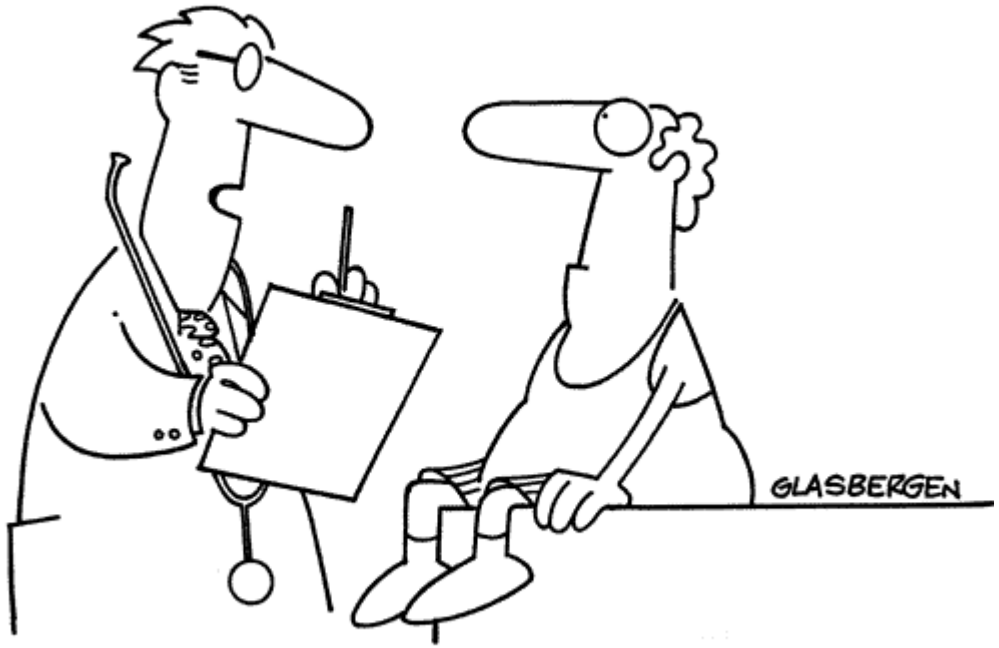


- Robert Darwin, in 1830, talking about his son, Charles.

A number of disorders are defined primarily by symptoms

- ADHD
- Anxiety Disorders
- Mood Disorders
- Concussion
- Oppositional Defiant Disorder
- Autism Spectrum Disorder

In assessing for these disorders, professionals tend to use symptom checklists, behavior rating scales, self-report measures, and observational systems, which for the most part measure symptoms alone, or do nothing to distinguish symptoms and impairment



"We can't find anything wrong with you, so we're going to treat you for Symptom Deficit Disorder."

Symptoms vs. Impairment?

- “Symptoms” are considered to be the behavioral expressions associated with a disorder (Barkley et al., 2006).
- “Impairment” involves the consequences that ensue as a results of these behaviors.
- Goldstein – a limitation resulting from a psychological, physical, or cognitive disorder that manifests as a reduced capability to meet the demands of life, such as physical mobility and self-care needs, family and social interaction expectations, domestic commitments, and school or work obligations.
- Impairment is mentioned as a criterion in a majority of DSM-5/ICD 10 disorders
- Legal definitions of disability (e.g., ADA) indicate that a diagnosis is not sufficient to determine a disability. An individual also must demonstrate a “limitation in a major life activity (e.g., learning) relative to most people.”

Symptom-Impairment Relationship

- Ratings of symptoms and impairment are correlated, but only moderately at best.
- ADHD symptom and impairment measures, depending on the measure, correlate in the range of .10 to .60. RSI total & Symptom score *r* = .29
- Symptoms are therefore not a proxy for impairment.
- Adding impairment criteria dramatically reduces identification rates; Our study of 314 clinic referred children for ADHD found 81% met symptom criterion on a maternal checklist. When we imposed the CBCL Attention scale T-score of 65 and a Global Impairment Index score of -1.5 SD, the diagnostic rate fell to 19%.
- *Diagnostic decisions based on both factors are more conservative, probably more accurate, and probably related to need for treatment*.

Why assess for impairment?

- Symptoms are common, impairment not necessarily
- Symptom-alone assessment is more likely to lead to false positive diagnoses (see Wakefield, 2006); Combining symptom and impairment metrics reduces the high rates of diagnosis.
- It might make sense to treat or accommodate a person's impairments more than their symptoms.
- Does a disability exist without impairment?

"How's the self-diagnosis coming?"

Recent Research: Symptoms and Impairment

- 457 College Students
- Administered several measures including the Barkley Adult ADHD Rating Scale and the Barkley Functional Impairment Scale.
  - 42 participants self-identified as being diagnosed with ADHD; however, only 14 (33%) met symptom criteria. Only 8 (19%) reported significant functional impairment.
  - 25 students met symptom cutoff for ADHD (6 symptoms or more endorsed “often” or “very often”), and 15 (60%) also met criteria for impairment.
- People with a diagnosis may not be impaired, while people with impairment may not have a diagnosis … Oops!

Do clinicians measure impairment?

- Gordon, Lewandowski, Murphy & Dempsey (2002) surveyed clinicians on a variety of issues and found weak agreement on issues related to how impairment is determined and how it should be used in diagnoses and accommodation decisions

- Nelson et al. (2014) reviewed 100 randomly selected psychological reports and found that childhood impairment was “rarely documented,” while current impairment (e.g., academic) was documented in 59% of cases.

- Clinicians often infer impairment from a clinical interview (subjective complaints), which again is self-report.

How do we measure impairment?

- Interview (patient complaints)
- Observation (inattentive, impulsive, anxious, slow)
- Performance testing (cognitive, academic, neuropsych)
- Functional (e.g., school GPA, job success, relationships, life skills)
- Impairment scales

When is impairment…impairment?

- A person has symptoms or a diagnosis
- An individual is distressed, discomforted, or upset by their condition
- A person gets lower than expected standardized test scores or fails a Board exam (medical, law, business)
- Achievement is discrepant from IQ
- Performance is 1, 1.5, or 2 SDs below the normative mean
- A person is unable to manage school, work duties, relationships, etc.

How do we measure impairment?

- **Unidimensional measures**
- Examples:
  - Barkley Functional Impairment Scale (Barkley, 2011) and BFIS-CA (Barkley, 2012)
  - Children's Global Assessment Scale (Bird, 1999)
  - Home Situations Questionnaire (Barkley, 1997)

- Pro's:
  - Ease of administration, some exhibit good psychometric characteristics, provides big picture
- Con's:
  - Generally limited norms, unknown how sensitive the measure is to change over time, less specific in terms of types of impairment

How do we measure impairment?

- **Multidimensional measures**
- Examples:
  - Impairment Rating Scale (Fabiano et al., 2006)
  - Weiss Functional Impairment Scale-5 (Weiss, 2014)
  - WHODAS 2.0
  - Rating Scale of Impairment (5-18 yrs) (Goldstein & Naglieri, 2016); 6 scales + Total

- Pros: most are standardized/norm referenced, provide a more specific picture than unidimensional measures, more useful for treatment

- Cons: sensitivity to change, not disorder specific, lack validity data at this time

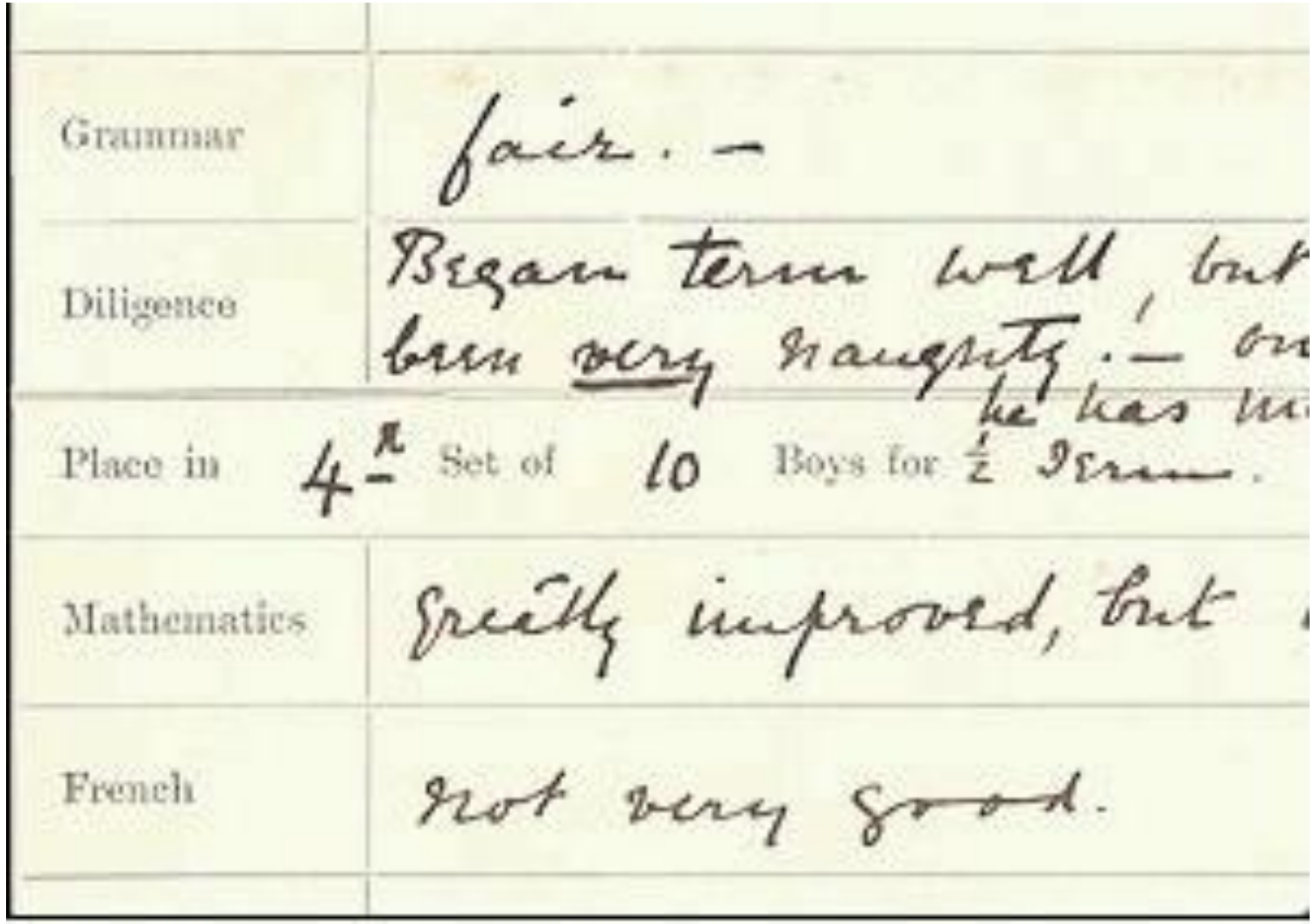
RSI by Goldstein & Naglieri sold by MHS

- Parent & teacher forms (5-12; 13-18 years)
- 29-41 items; 5-10 minutes
- School, Social, Mobility, Domestic, Family, Self-care and Total scales (T-scores)
- Good standardization & psychometrics
- Can inform treatment
- All online

WHODAS 2.0

- For adults; self-report
- 36 or 12 item versions
- Takes 5 minutes or less
- Communicating, Mobility, Life Activities, Participation, Self-care, Getting Along (%iles)
- Health focus
- International; well-researched
- Can inform treatment
- Free

Whose report card?



Grammar	fair. –
Diligence	Began term well, but been very naughty. – on he has m
Place in 4th Set of 10 Boys for ½ Term.	
Mathematics	Greatly improved, but
French	Not very good.

Implications for Assessment

- This talk is an “infomercial” for measuring impairment.
- There is compelling rationale to include impairment measures in our assessments to improve diagnosis, align with legal mandates, and identify treatment targets.
- Impairment measures continue to improve but need research to validate
- Which measure(s) best serve(s) our professional purposes and practices
- We need more and better research on assessing impairment in children, what it looks like across age and different disorders, as well as how impairment can be predicted, prevented, and ameliorated.

Implications for Treatment

- Many argue that we should treat impairments rather than symptoms
- New research suggests that people with subthreshold symptoms often have as much or more impairment than those above threshold
- Adaptive behavior scales (e.g., Vineland) provide guidance for certain functional domains
- The RSI and WHODAS also can be used to identify treatment targets
- We need studies that link assessment of impairment to specific treatment options that then demonstrate efficacy
- We need to use impairment measures (pre and post treatment) to monitor improvement in health, mental health, and education.

Questions?

Thank you and best of luck!