



Silos, Gorillas, and Personality Assessment

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About me

- Educational and Developmental Psychologist and supervisor
- Lecturer and researcher at Monash University
- Private practice – complex assessment clinic (mostly adolescents and young adults)
- Hospital – clinical trials for treatment resistant depression, and clinical trials for cognitive decline/personality changes in dementia

What we are covering

- Silos
- Gorillas
- Personality assessment (NEO-PI-3 and PAI)
- Case study – Andrea
- How our training, experience, and inattentional blindness impacts our assessment and formulation, what we can do about it, and an example of how personality may help
- *Financial disclaimer: Shane receives no benefit from the test publishers, but open to donations!*
- *Note: Considerable supervision is required before attempting to use personality assessment tools in clinical practice*

Silo art in Outback Australia.....and our training paradigms



What happens when we see information that doesn't fit?

Gorilla Opacity

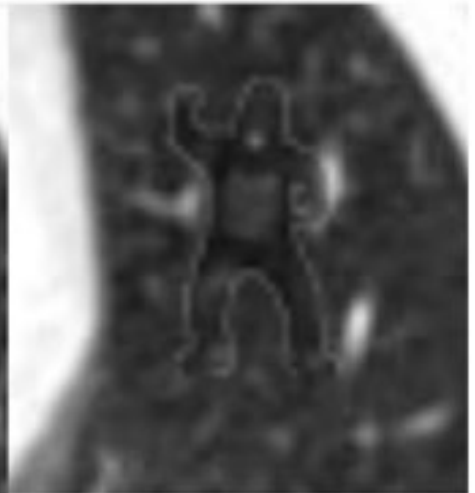
Frame 1

Frame 2

Frame 3

Frame 4

Frame 5



50%

75%

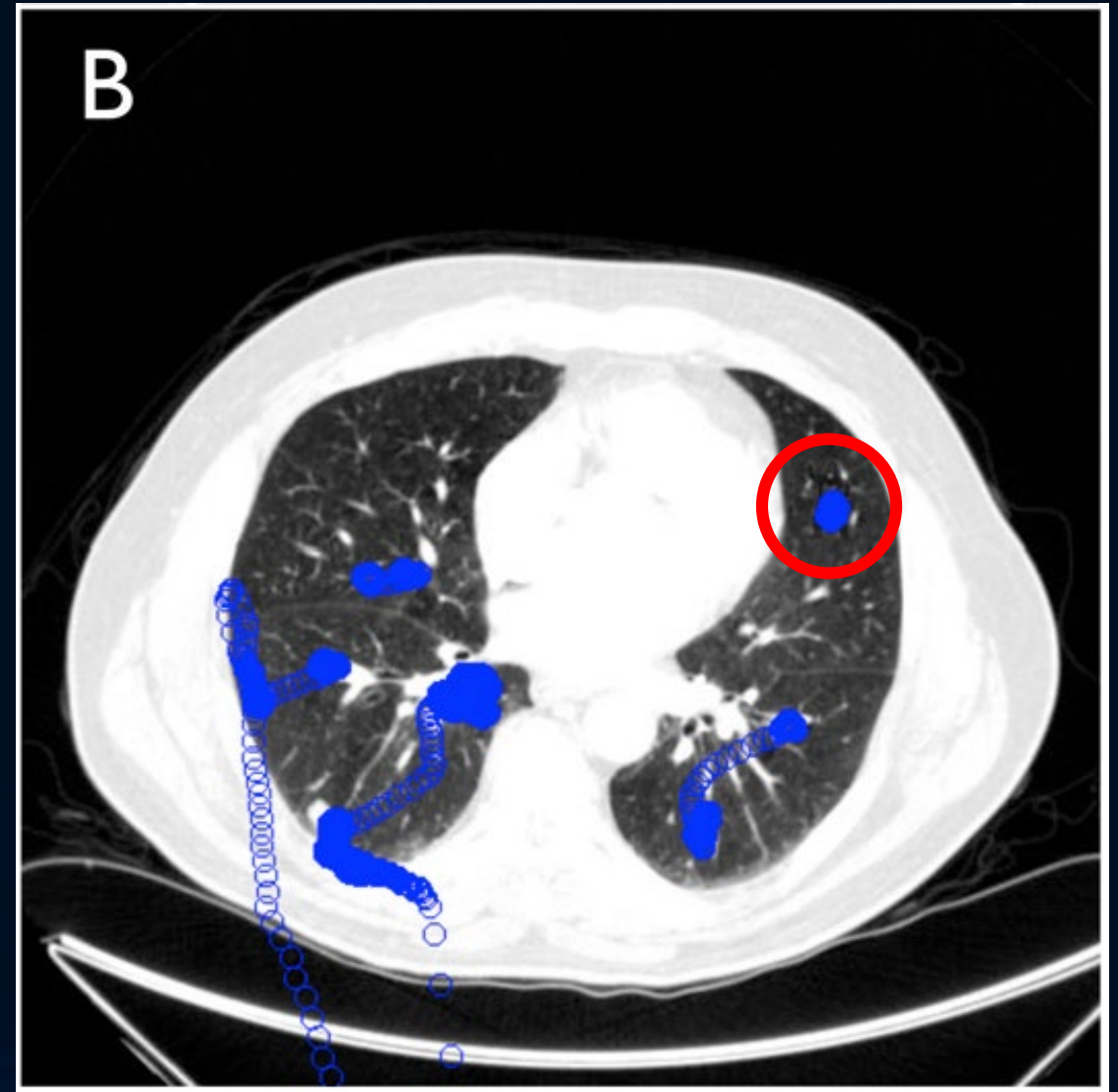
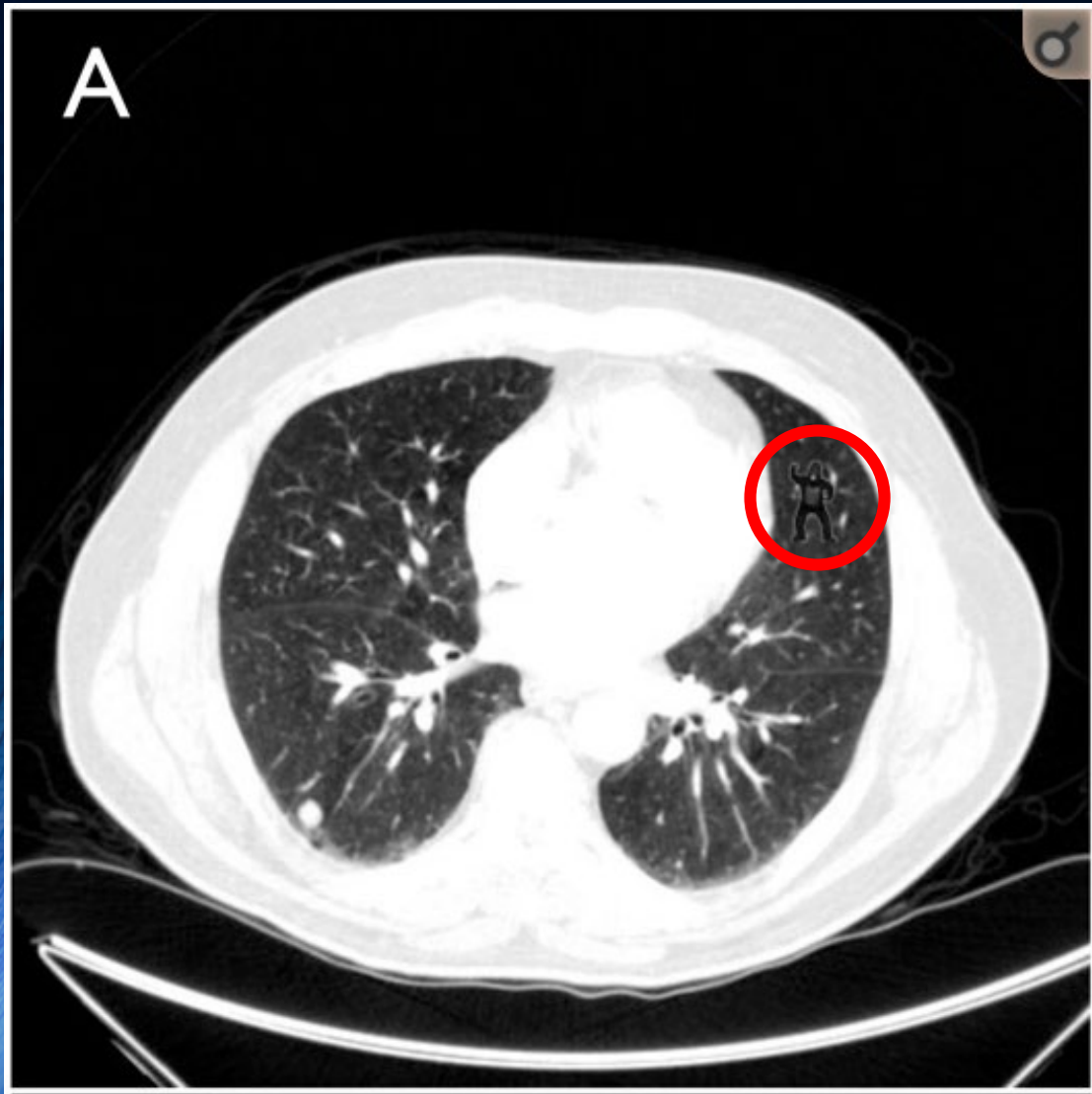
100%

75%

50%

Gorilla opacity increased from 50 to 100%, then back down to 50% over the course of 5 frames within the chest CT scan.

We see it.....and end up not seeing it at all



A: Chest CT Image containing the embedded gorilla. B: Eye-position plot of one radiologist who did not report seeing the gorilla. Each circle represents eye-position for 1ms.

Confirmation bias – how does it happen?

- As an educational and developmental psychologist, what was I (mostly) trained to assess for?
 - Learning difficulties
 - Intellectual disability
 - Giftedness
 - Social skills
 - Mood
 - Autism
 - Problematic behaviour
 - Attention/concentration/organisation/motivation (*and mostly focus on children*)

Confirmation bias – how does it happen?

What we don't generally expect to see, and what we might see instead (especially in adolescents)

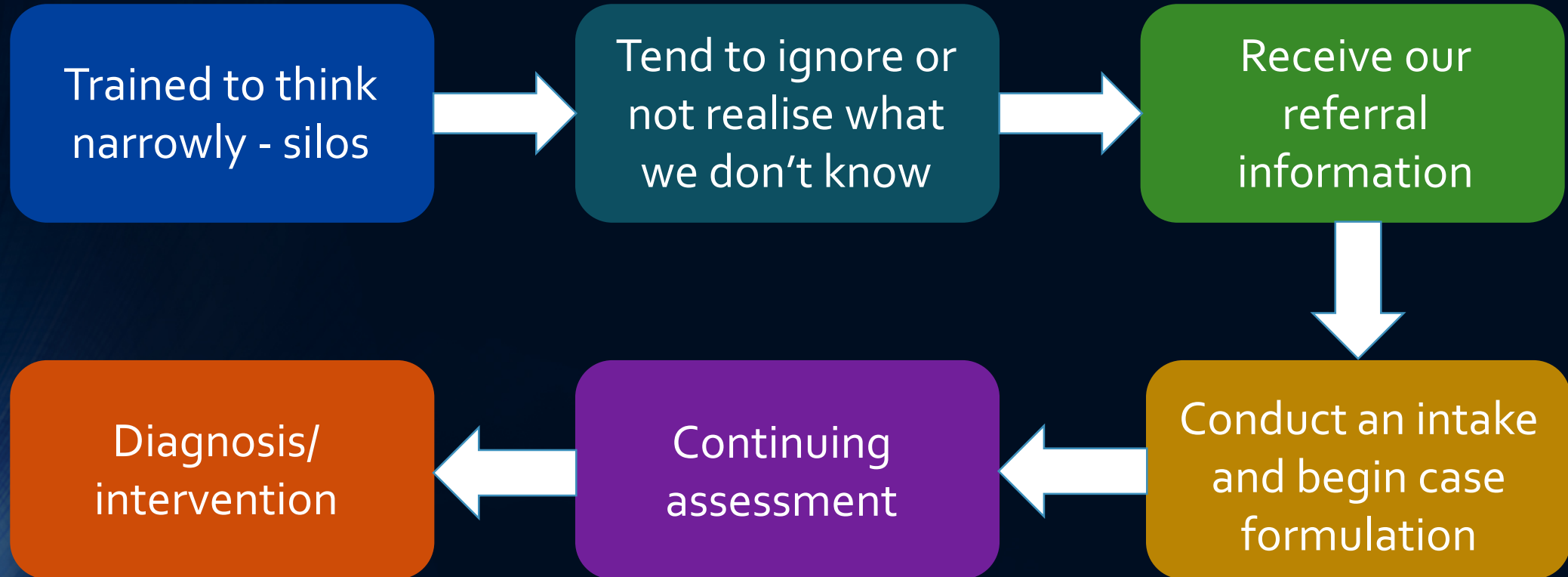
- Phobias
- Bipolar disorders
- Personality disorders
- Thought disorders
- Trauma
- Medical conditions
- Drug/alcohol abuse
- Anxiety, Attachment Disorders
- ADHD Hyperactivity, transitions
- ODD, Conduct Disorder, Autism, social difficulties
- Autism, Learning Disorders, imagination
- Autism, ADHD, ODD, Intellectual Disability
- Everything and anything
- ODD, Conduct Disorder

Actual underlying problem

What we were trained to see

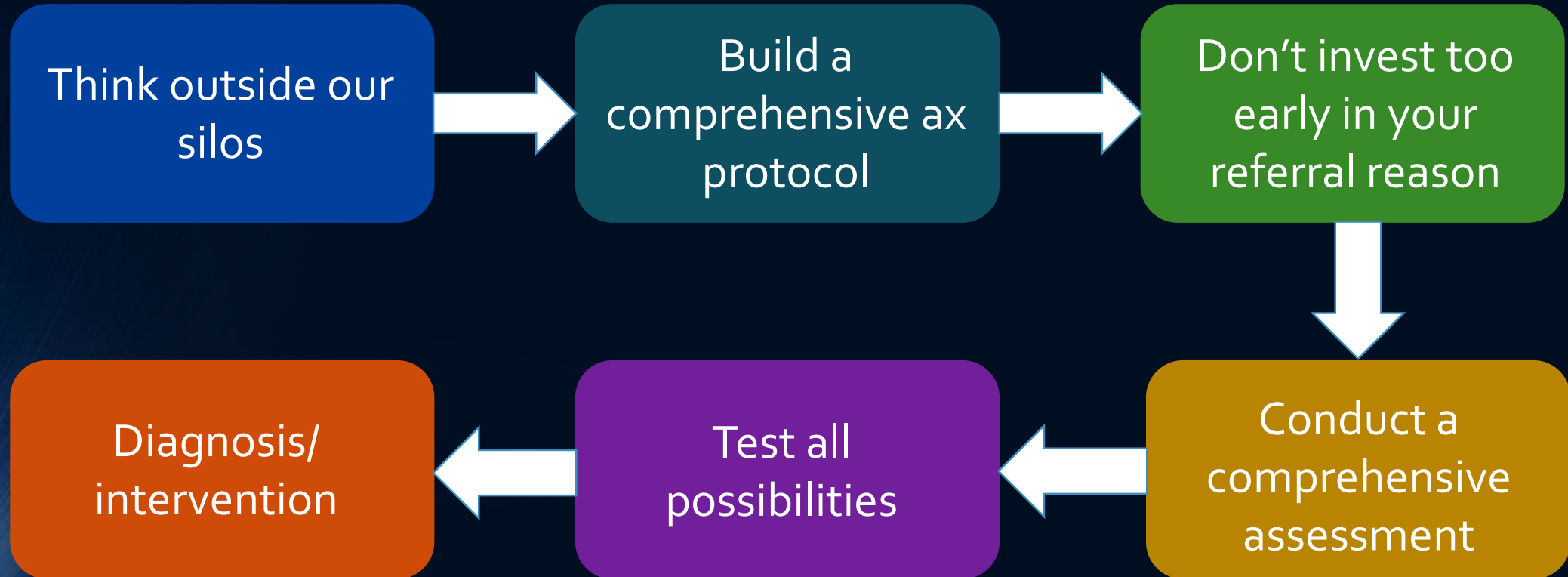
Confirmation bias – how does it happen?

- Priming – we tend to be invested in the first piece of information we have, and our earliest decisions about that information
- Sequential processing – as we work through our information piece by piece, our confirmation biases become stronger.
- Simultaneous processing – using all of the information available to us at the same time would reduce our confirmation bias
- *Taking a simultaneous processing approach once we have sequentially processed everything does not reduce confirmation bias (Jones, & Schulz-Hardt, 2001)*



So what can we do about it?

- Professional development in the areas we don't know as much about
- When your referral question says "dyslexia", you have two choices:
 - Assess for dyslexia and learning difficulties, or
 - Brainstorm everything that can cause a person to be presenting like that (avoid the labels, at least at the beginning)
- Hypothesis test your data – ruling in and ruling out
- Try to avoid decision making while you are still assessing and gathering data (minimise sequential processing)
- Think developmentally – adolescence/young adulthood is the most common time for emerging complex psychopathology
- Use tools to investigate areas that you know less about clinically



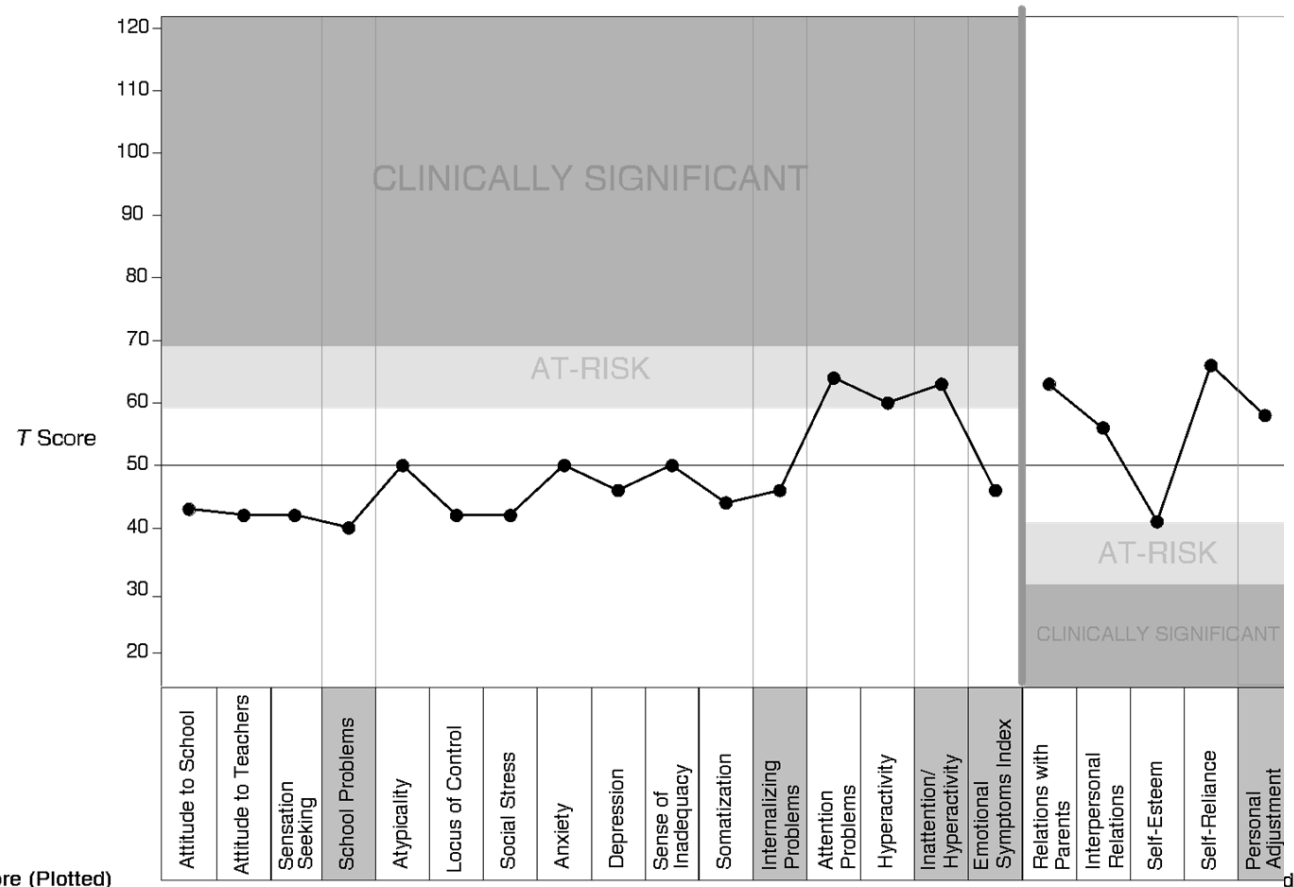
Case study - Andrea

- 15 year old female, referred for learning assessment
- Struggles to complete work on time, often isn't prepared for classes, forgets about assignments
- Overcommits to activities, and gets very stressed and anxious. Has experienced several panic attacks in last six months
- Met early milestones as expected (physical, communication, social)

Case study - Andrea

- Cognitive assessment – high average to well above average overall, slight weakness in working memory and processing speed
- Academic achievement – average to high average overall, slight weakness in reading fluency
- Distractible, disorganized, daydreams – across settings, present since she was young

SELF CLINICAL AND ADAPTIVE T-SCORE PROFILE

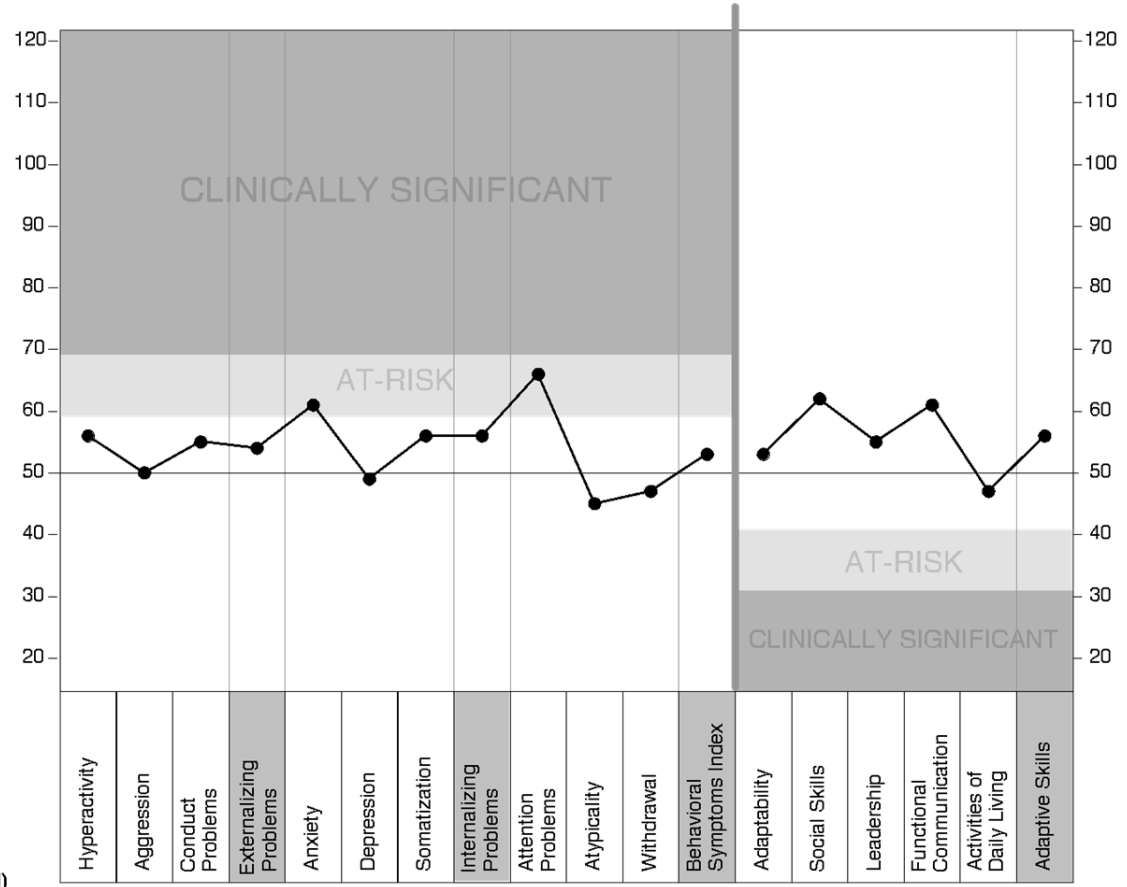


T Score (Plotted)

● Gen. Gender-Spec.	43	42	42	40	50	42	42	50	46	50	44	46	64	60	63	46	63	56	41	66	58	Spec.	56	50	55	54	61	49	56	56	66	45	47	53	53	62	55	61	47	56
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Percentile	28	24	23	17	63	22	24	58	51	60	45	42	89	84	88	45	95	66	18	96	77	Spec.	80	74	83	80	87	63	79	80	93	45	46	73	57	87	63	87	36	67
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PARENT CLINICAL AND ADAPTIVE T-SCORE PROFILE



T Score (Plotted)

● Gen. Gender-Spec.	43	42	42	40	50	42	42	50	46	50	44	46	64	60	63	46	63	56	41	66	58	Spec.	56	50	55	54	61	49	56	56	66	45	47	53	53	62	55	61	47	56
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Is it ADHD?

Diagnostic Criteria

1. **Inattention:** Six (or more) of the following symptoms have persisted for at least 6 months to a degree that is inconsistent with developmental level and that negatively impacts directly on social and academic/occupational activities:
 - ★ Often fails to give close attention to details or makes careless mistakes in schoolwork, at work, or during other activities (e.g., overlooks or misses details, work is inaccurate).
 - b. Often has difficulty sustaining attention in tasks or play activities (e.g., has difficulty remaining focused during lectures, conversations, or lengthy reading).
 - ★ Often does not seem to listen when spoken to directly (e.g., mind seems elsewhere, even in the absence of any obvious distraction).
 - ★ Often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace (e.g., starts tasks but quickly loses focus and is easily sidetracked).
 - ★ Often has difficulty organizing tasks and activities (e.g., difficulty managing sequential tasks; difficulty keeping materials and belongings in order; messy, disorganized work; has poor time management; fails to meet deadlines).
 - f. Often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort (e.g., schoolwork or homework; for older adolescents and adults, preparing reports, completing forms, reviewing lengthy papers).
 - g. Often loses things necessary for tasks or activities (e.g., school materials, pencils, books, tools, wallets, keys, paperwork, eyeglasses, mobile telephones).
 - ★ Is often easily distracted by extraneous stimuli (for older adolescents and adults, may include unrelated thoughts).
 - ★ Is often forgetful in daily activities (e.g., doing chores, running errands; for older adolescents and adults, returning calls, paying bills, keeping appointments).

Case study - Andrea

- History of dissociation
 - First experienced in grade 6, looked at self in the mirror and felt like face was moving
 - Increasing in intensity and duration for past two years, some days can happen for hours
 - Afraid that she won't be able to "reconnect", that she might get stuck in that state
- *"It's like I'm looking at the world through a flywire screen"*
- *"Sometimes I will be walking down a hallway at school and feel like I am there but not connected to anything"*
- *"I saw a psychologist last year who thought I might have ADHD and anxiety. The psychologist tried to use CBT for my anxiety, but I really didn't like it. Can we not do CBT please?"*

Is it Panic Disorder?

Diagnostic Criteria

300.01 (F41.0)

★ Recurrent unexpected panic attacks. A panic attack is an abrupt surge of intense fear or intense discomfort that reaches a peak within minutes, and during which time four (or more) of the following symptoms occur:

Note: The abrupt surge can occur from a calm state or an anxious state.

1. Palpitations, pounding heart, or accelerated heart rate.
2. Sweating.
3. Trembling or shaking.
4. Sensations of shortness of breath or smothering.
5. Chest pain or discomfort.
6. Nausea or abdominal distress.
7. Feeling dizzy, unsteady, light-headed, or faint.
8. Derealization (feelings of unreality) or depersonalization (being detached from oneself).
9. Fear of losing control or “going crazy.”

★ At least one of the attacks has been followed by 1 month (or more) of one or both of the following:

1. Persistent concern or worry about additional panic attacks or their consequences (e.g., losing control, having a heart attack, “going crazy”).
2. A significant maladaptive change in behavior related to the attacks (e.g., behaviors designed to avoid having panic attacks, such as avoidance of exercise or unfamiliar situations).

Is it Depersonalization Disorder?

Diagnostic Criteria

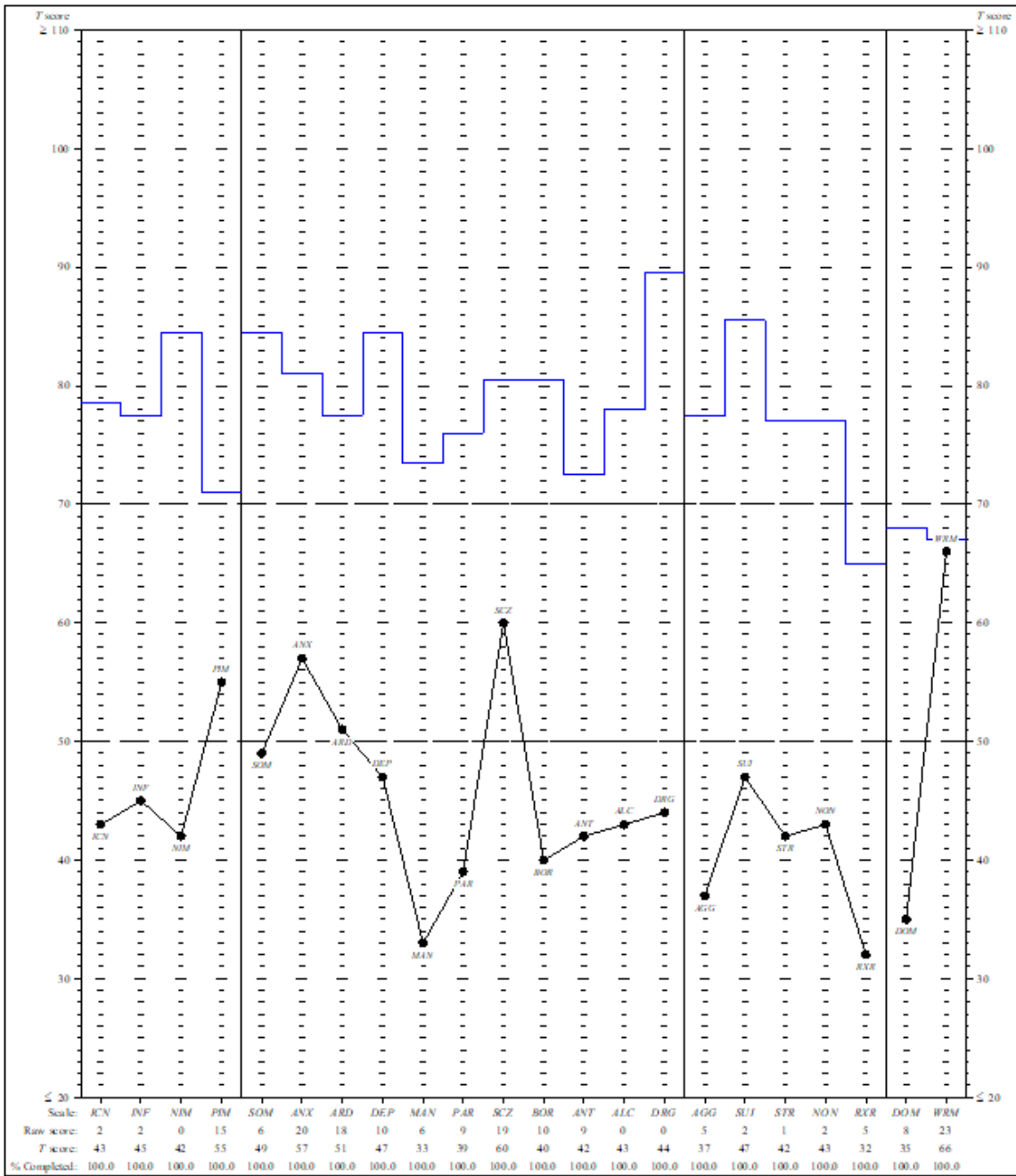
300.6 (F48.1)

- ★ The presence of persistent or recurrent experiences of depersonalization, derealization, or both:
 1. **Depersonalization:** Experiences of unreality, detachment, or being an outside observer with respect to one's thoughts, feelings, sensations, body, or actions (e.g., perceptual alterations, distorted sense of time, unreal or absent self, emotional and/or physical numbing).
 2. **Derealization:** Experiences of unreality or detachment with respect to surroundings (e.g., individuals or objects are experienced as unreal, dreamlike, foggy, lifeless, or visually distorted).
- ★ During the depersonalization or derealization experiences, reality testing remains intact.
- ★ The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- ★ The disturbance is not attributable to the physiological effects of a substance (e.g., a drug of abuse, medication) or another medical condition (e.g., seizures).
- E. The disturbance is not better explained by another mental disorder, such as schizophrenia, panic disorder, major depressive disorder, acute stress disorder, posttraumatic stress disorder, or another dissociative disorder.

Case study - Andrea

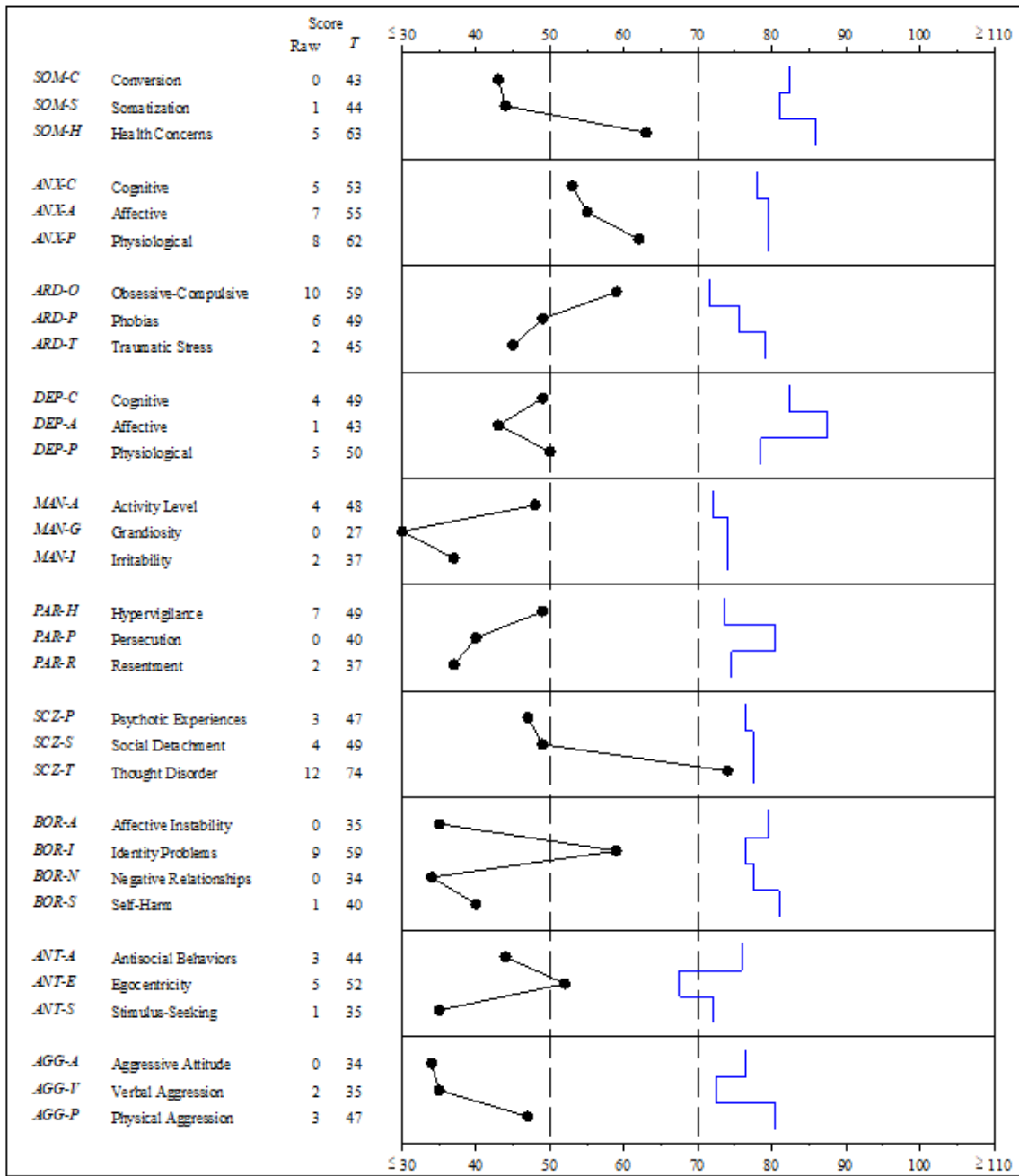
- After structured diagnostic interview, Andrea meets criteria for:
 - *ADHD inattentive type*
 - *Panic Disorder*
 - *Depersonalization Disorder*
- A strictly educational approach would likely have identified ADHD. A strictly clinical approach may have identified Panic/Depersonalisation or both
- Adding personality into the mix....

Full Scale Profile



- Response style appears valid
- Elevated SCZ
- Little risk of harm to self or others
- Positive help-seeking (low RXR)
- High WRM / low DOM – driven to help others and put others first, doesn't stand up for self?

Subscale Profile



- Physiological effects of anxiety and health concerns?
- Elevated Thought Disorder – confusion and perplexity in thinking

Scale		Raw Score	T Score	Range
Factors				
(N)	Neuroticism	---	45	Average
(E)	Extraversion	---	45	Average
(O)	Openness	---	73	Very High
(A)	Agreeableness	---	81	Very High
(C)	Conscientiousness	---	41	Low
Neuroticism Facets				
(N1)	Anxiety	15	44	Low
(N2)	Angry Hostility	7	31	Very Low
(N3)	Depression	9	38	Low
(N4)	Self-Consciousness	18	57	High
(N5)	Impulsiveness	17	48	Average
(N6)	Vulnerability	11	43	Low
Extraversion Facets				
(E1)	Warmth	32	72	Very High
(E2)	Gregariousness	18	45	Average
(E3)	Assertiveness	16	48	Average
(E4)	Activity	15	39	Low
(E5)	Excitement-Seeking	14	29	Very Low
(E6)	Positive Emotions	31	70	Very High
Openness Facets				
(O1)	Fantasy	29	66	Very High
(O2)	Aesthetics	31	68	Very High
(O3)	Feelings	27	60	High
(O4)	Actions	15	43	Low
(O5)	Ideas	28	67	Very High
(O6)	Values	30	72	Very High
Agreeableness Facets				
(A1)	Trust	29	75	Very High
(A2)	Straightforwardness	23	62	High
(A3)	Altruism	26	58	High
(A4)	Compliance	28	80	Very High
(A5)	Modesty	30	75	Very High
(A6)	Tender-Mindedness	22	53	Average
Conscientiousness Facets				
(C1)	Competence	15	38	Low
(C2)	Order	13	43	Low
(C3)	Dutifulness	23	56	High
(C4)	Achievement Striving	17	43	Low
(C5)	Self-Discipline	10	34	Very Low
(C6)	Deliberation	24	67	Very High

- **Low Anxiety, Anger, Depression, Vulnerability** – distress more likely associated with external stressors
- **Very High Agreeableness** – values pleasing others more than anything, fears disappointing others
- **Very High Openness** – very engaged with internalised experiences, a deep thinker
- **Low Actions, Very Low Self-Discipline** – not good at following through, especially when it is for herself
- **Low Conscientiousness** – wants to do what is expected, but not motivated to achieve and generally less organised

- ADHD / Panic / Depersonalisation? Or.....
- *An intelligent, highly intellectualising young person who values helping others more than herself, tries to please everyone at the expense of herself, and is struggling to live up to her own expectations. Panic occurred when she felt overwhelmed. Depersonalisation occurred as she became more preoccupied with her own thoughts about everything she was doing and had to do (indulgent, but also a maladaptive coping strategy)*
- But why didn't CBT work? She had some mood difficulties, and clearly unhelpful negative thoughts about herself
- *High Openness leads to a need to understand – before she could implement (remember the low actions and self-discipline), we had to TEACH her about CBT, not DO it with her.*

Summary

- Be aware of your training and experience silo
- Try to catch your own early decision making
- Watch out for gorillas
- Conduct a comprehensive assessment
- Consider using personality assessment tools
- Slides and materials: www.shanecostello.net/nz

The 12th Conference of the International Test Commission

Diversity and equity in a globalized digital world: Opportunities and challenges for assessment

14-17 July 2020

**University of Luxembourg
Belval Campus
Luxembourg**

CALL FOR PAPERS



WELCOME TO LUXEMBOURG

The Grand Duchy of Luxembourg is delighted to invite you to the 2020 ITC Conference, taking place at the University of Luxembourg's Belval Campus. The conference promises to be an exceptional, professional and scientific experience in a unique cultural environment renowned for its vibrancy and cosmopolitan flair. With its flourishing economy, extremely diverse population and active commitment to research, Luxembourg is the perfect venue to host the 2020 conference. The 2020 conference will be exploring the theme Diversity and equity in a globalized, digital world: Opportunities and challenges for assessment. This theme not only highlights cultural diversity following from globalisation, it also tackles today's rapid advancements in the field of technology-based assessment.

Belval Campus is situated in the south of Luxembourg and is easily accessible from Luxembourg City and Esch-sur-Alzette. Luxembourg is strategically located in the heart of Europe and is within easy reach of numerous major European- and international business centres.

THEME

Diversity and equity in a globalized digital world: Opportunities and challenges for assessment

Sub-themes

- Test development and validation in international and multicultural environments
- Innovations and advances in psychometric theory, modelling and technologies
- Current issues of policy, diversity and equity
- Best practices in testing and assessment
- Test security and privacy in a globalized digital world

IMPORTANT DATES

31 Oct. 2019	Deadline for workshop submissions
15 Dec. 2019	Deadline for paper and poster submissions
15 Dec. 2019	Deadline for symposia submissions
28 Feb. 2020	Notification to authors
1 Feb. - 30 Apr. 2020	Early bird registration
1 May - 13 Jul. 2020	Late registration

KEYNOTE SPEAKERS

The following distinguished speakers are confirmed to present at the 2020 conference:

Prof Anita Hubley, University of British Columbia, Canada
Contributions of Response Processes to Test Validation and Development

Prof Sacha Epskamp, University of Amsterdam, The Netherlands
Network Psychometrics: Current State and Future Directions

Prof Jonathan Templin, University of Iowa, United States of America
Building a Diagnostic Model-Based Formative Assessment System for Personalizing Educational Progress

Prof John Fremer, Caveon Consulting Services, United States of America
Challenges Confronted and Lessons Learned: Protecting Test Content and Personal Information from Test Security Threats in International Testing Programs

Dr Sara Ruto, PAL Network, Kenya
Measuring Learning for All Children: The Citizen Led Assessment Approach

Prof John O’Gorman, Griffith University, Australia
The Future for Organisational Neuroscience in Selection and Assessment, or is There One?

Prof Lianzhen He, Zhejiang University, China
China’s Standards of English Language Ability: Impetus for Change in Language Learning, Teaching and Assessment

Prof Aletta Odendaal, University of Stellenbosch, South Africa
Psychological Testing and Assessment in Developing Context: Shifting the Boundaries of Theory and Practice

WORKSHOPS

Several pre-conference workshops are planned covering state-of-the-art testing methods, techniques, and practices.

Visit www.itc-conference.com for updates and news on workshops.

THE PROGRAM

14 Jul. 2020	Pre-conference workshops
14 Jul. 2020	Opening ceremony
15-17 Jul. 2020	Lectures, symposia, oral presentations and poster presentations
16 Jul. 2020	Gala dinner
17 Jul. 2020	Closing ceremony

USEFUL INFORMATION

ITC website	https://www.intestcom.org
ITC 2020 conference website	https://www.itc-conference.com
University of Luxembourg website	https://www.uni.lu
Luxembourg Tourism website	https://www.visitluxembourg.com

NEWS

News about the conference will be updated regularly on the conference website

www.itc-conference.com.

CONTACT US

Prof Samuel Greiff, Chair of the Local Organising Committee, University of Luxembourg
Email: itc@uni.lu

