

Overview:

The book will be a significant re-working of Francesca Happé's 1994 book *Autism: An Introduction to Psychological Theory*. The book aims to provide an overview of psychological theory about autism, citing and critically discussing key evidence. It uses a "levels of explanation" framework to explore the relationship between psychological (cognitive) explanatory models and biological or behavioural models. Important features of the book are that it should be very concise, and also that it assumes a certain level of basic knowledge. An ideal reader would be a psychology undergraduate in their final year, or practitioners in clinical or educational psychology.

A key focus of the new book is to emphasise the autistic perspective and the importance of partnership with autistic people and their allies in research. While the book is written by non-autistic psychologists, and focuses on evidence and theory from psychology, we make every effort to contextualise findings within lived experience.

Therefore, as well as writing core content for each chapter, outlined below, we are inviting autistic people, or their allies (e.g. parents, practitioners) to provide succinct commentaries on each chapter. These will be included as post-scripts, one at the end of every chapter, giving a community viewpoint on the issues covered. There is also a separate 'terms of reference' document to provide further detail on what we are asking community contributors to do.

Chapters:**1. Introduction**

A description of the purpose and format of the book. Introducing the notion of "levels of explanation" (biological, cognitive, behavioural) and also considering different timescales of explanation. A list of key facts and fiction to debunk myths at the outset.

Figure 1.1: Illustration of levels of explanation (Figure 1.1. in original book)

Figure 1.2: sketch notes

2. The history of autism

A narrative description of the original definitions of autism by Leo Kanner, Hans Asperger and then more recent conceptualisations including Lorna Wing's spectrum. An account of autism in the community: history from an autistic perspective; changes in societal perceptions over time. A potted history of the neurodiversity movement.

Figure 2.1: illustration of aloof / passive / odd sub-types (Figure 3.1 from original book)

Figure 2.2: sketch notes

3. Autism at the behavioural level

A definition of autism and a review of different ways to describe or characterise people with the diagnosis. Discussion of the changing diagnostic criteria and the impact of these changes on diagnosis and prevalence. A discussion of heterogeneity in autism ("the autisms") including exploration of the prevalence of intellectual disability in autism. Description of sensory differences; description of common co-diagnoses. Brief outline of what we know about: autism in women & girls; autism and ageing. Section on autistic behaviour and societal norms.

Figure 3.1: chart illustrating one example of the autism constellation (language x autism feature x IQ)

Table 3.1: DSM-5 criteria

Figure 3.2: sketch notes

4. Autism at the biological level

Briefly de-bunking psychogenic theories. Evidence for genetic and neuro(bio)logical causes and for neuro(bio)logical features – lifespan structural anomalies, white-matter integrity etc.

Figure 4.1: gene-function mapping diagram (Molly Losh)

Figure 4.2: brain fig in Amaral et al 2008 that is quite nice....

Figure 4.3: Progression of structural MRI measurements over time as applied to autism spectrum disorder (Ecker)

Figure 4.4: sketch notes

5. Autism at the cognitive level: what makes a good theory?

A short chapter providing a re-iteration of the diagnostic, behavioural features of autism at a cognitive level. Reporting and critiquing psychological evidence of difficulties in five key domains: social interaction & communication; restricted and repetitive behaviours; sensory sensitivities; other cognitive features (e.g. visuo-spatial abilities); and early signs (studies of infant siblings). Also a section describing what to look for in a strong theory (and in strong evidence for that theory)

Figure 5.1: mental state taxonomy (new figure)

Figure 5.2: mental state understanding in real life (new illustration modelled on Figure 10.1 in original book)

Figure 5.3 Sally-Anne task (Figure 5.1 in original book)

Table 5.1: a checklist for a good psychological theory

Figure 5.4: sketch notes

6. Autism at the cognitive level: “primary deficit” models

Describing and reviewing the evidence for theoretical models which posit a primary deficit including: a) theory of mind, with variants; and b) executive dysfunction. Robust critique of these models.

Figure 6.1: Developmental sequence of key milestones relating to ToM / social cognition and language

Figure 6.2: False photo task (Figure 5.4 from original book)

Figure 6.3: sketch notes

7. Autism at the cognitive level: developmental progress models

Describing and reviewing the evidence for theoretical models which posit an atypical developmental trajectory including: a) social orienting hypothesis, b) social motivation hypothesis, c) social-emotional / intersubjectivity accounts. Include burgeoning interest in motor domain.

Figure 7.1: Waddington’s epigenetic landscape

Figure 7.2: sketch notes

8. Autism at the cognitive level: cognitive difference models

Describing and reviewing the evidence for theoretical models which posit a cognitive difference including: a) weak central coherence, b) enhanced perceptual functioning, c) information processing models, d) Bayesian models and e) systematising/empathising. NB: this whole chapter would foreground autistic strengths / differences and move away from deficit-focused analysis.

Figure 8.1: weak central coherence (figure 10.1 from original book)

Figure 8.2: homograph task (figure 10.3 from original book)

Figure 8.3: sketch notes

9. The impact of cognitive models

An overview of the content of the book, interpreting the findings in the light of their impact on clinical, educational and third sector practice. What do we do know which is derived from psychological theory / investigation? What should we be doing differently? Also, a section on pseudoscience and telling the difference between an evidence-based approach and false promises. Discuss double empathy problem & social theories of autism here too.

Table 9.1: common markers of pseudoscience

10. Looking to the future

An analysis of some of the cutting-edge questions for psychological research in the field including:

- neurodiversity, autistic rights and self-advocacy (parallel with gay rights movement)
- one autism, or many autisms? – exploring heterogeneity within the spectrum (should we be trying to parse it at all?)
- Neurodiversity, co-morbidity and intersectionality

Table 10.1: ideas for participation in research at all stages of the research cycle

Figure 10.1: illustrating autism as one end of a normal distribution versus a separate distribution all together

Table 10.2: James Lind Alliance / Autistica top ten priorities