PENAL REFORM INTERNATIONAL

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Clinical case formulation

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Aims of session

(1) To describe the history of, and rationale for clinical case formulation, adopting a cognitive-behavioural framework.

(2) To describe the nature of case formulation and some of the procedures involved.

(3) To illustrate with published case examples

(3) To apply to your own clinical referrals

The distinctiveness of formulation

DIAGNOSTIC CLASSIFICATION SYSTEMS

- DSM-IV, ICD-10
- Syndrome categories
- Allocation of individuals to groups with apparent common features
- Advantageous for disorders of known aetiology / identifiable pathogens

THE SYMPTOM-BASED APPROACH

- Used in behaviour therapies
- Focus on single symptoms in isolation or in series
- Advantageous for assessment and management of specific symptoms / complaints

Diagnostic classification systems

Some difficulties are discussed by Clark, Watson & Reynolds (1995) and include:

- Comorbidity (50-60% overlap of some diagnostic categories in DSM-IV)
- Heterogeneity:
  - (a) within categories;
  - (b) unclassifiable presentations leading to poor 'coverage' of the array of human problems.
- Organisational problems
- Unfounded assumptions regarding aetiology (the 'template-matching' theory)?

Co-morbidity and DSM-IV categories

BETWEEN ANXIETY AND OTHER DISORDER CATEGORIES, e.g.

- 60% of individuals with one DSM-IV diagnosis also meet criteria for another
- 83% of those with Generalised Anxiety disorder met criteria for at least one other disorder
- Rates of co-morbidity between anxiety disorders and other disorders vary between 46% and 93%

BETWEEN DIFFERENT ANXIETY DISORDERS, e.g.

- High rates of co-morbidity are observed between different DSM-IV anxiety disorders
- Strong links have been found between diagnosis of anxiety disorders and hypochondriasis, somatization and other problems such as substance abuse
- Reasons for co-morbidity are difficult to interpret, especially with regard to whether they are clinical or artifactual

The symptom-based approach

as traditionally used in behaviour therapies

These approaches in turn have been criticised on the grounds of:

- Superficiality
- Focus on symptoms only and neglect of underlying mechanisms
- Insensitivity - ignoring individual differences
- Resultant mechanical application of therapeutic methods

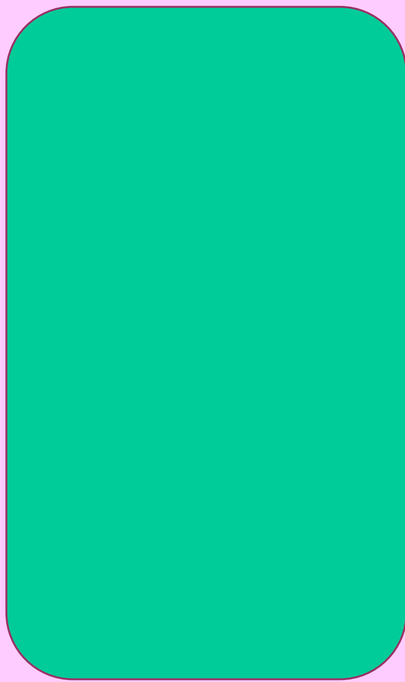
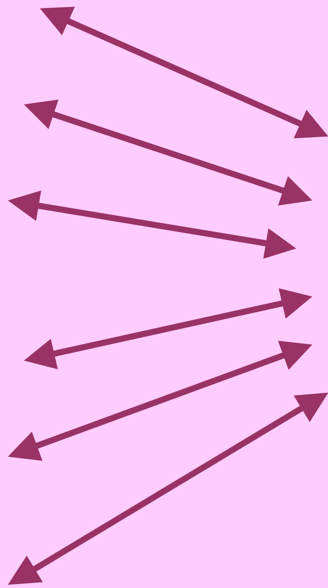
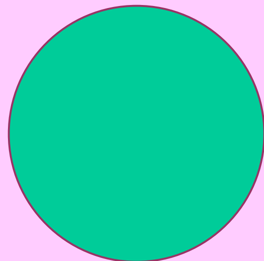
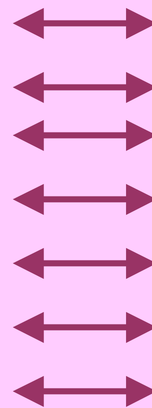
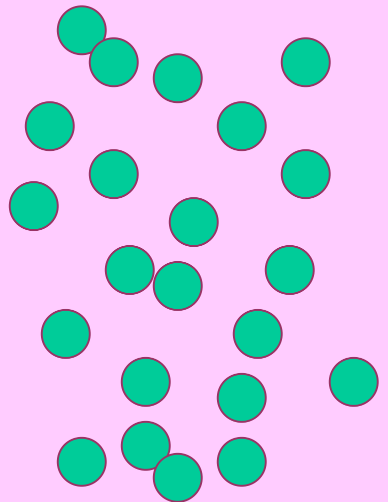
The centrality of formulation

Body of scientific knowledge

Human individuality and variability

FORMULATION:

individualisation of theory

What is formulation?

A hypothesis which has three components

(Meyer & Turkat, 1979; Turkat, 1986)

- **It identifies the functional relationship amongst the various presenting problems of the client.**
- **It accounts for the aetiology of these observed or reported difficulties.**
- **It provides predictions of the client's response to future stimulus situations.**

Formulation can be described as a 'data-based' approach in which the clinician's primary task is to construct a working theory which can make sense of the data; i.e., of the pattern of problems reported by and/or observed in the client.

Some advantages of using case formulations

- The process avoids the clinical rigidity and the theoretical limitations of diagnostic classification systems
- Its primary aim is to help in making sense of the individual case: to provide a unique explanation of the client's problems
- Adopting such an approach, it is assumed that connections must be made between the individual case and relevant empirical finding
- Formulations have a dynamic rather than a static focus: in other words they are open to revision as further information emerges
- Contents of formulations are empirical testable and refutable
- They afford the possibility of making links between behavioural/cognitive and other theoretical approaches

Steps in formulation

(after Shapiro, Turkat, Persons)

1. **The client is interviewed with the goal of identifying and describing present behaviour dysfunctions. This may include construction of a ‘problem list’.**

2. **An attempt is made to measure these uncontrolled observations in a controlled manner.**

3. **The clinician generates all possible theories that might account for the present dysfunction.**

4. **The clinician then conducts ‘experiments’ to eliminate untenable hypotheses.**

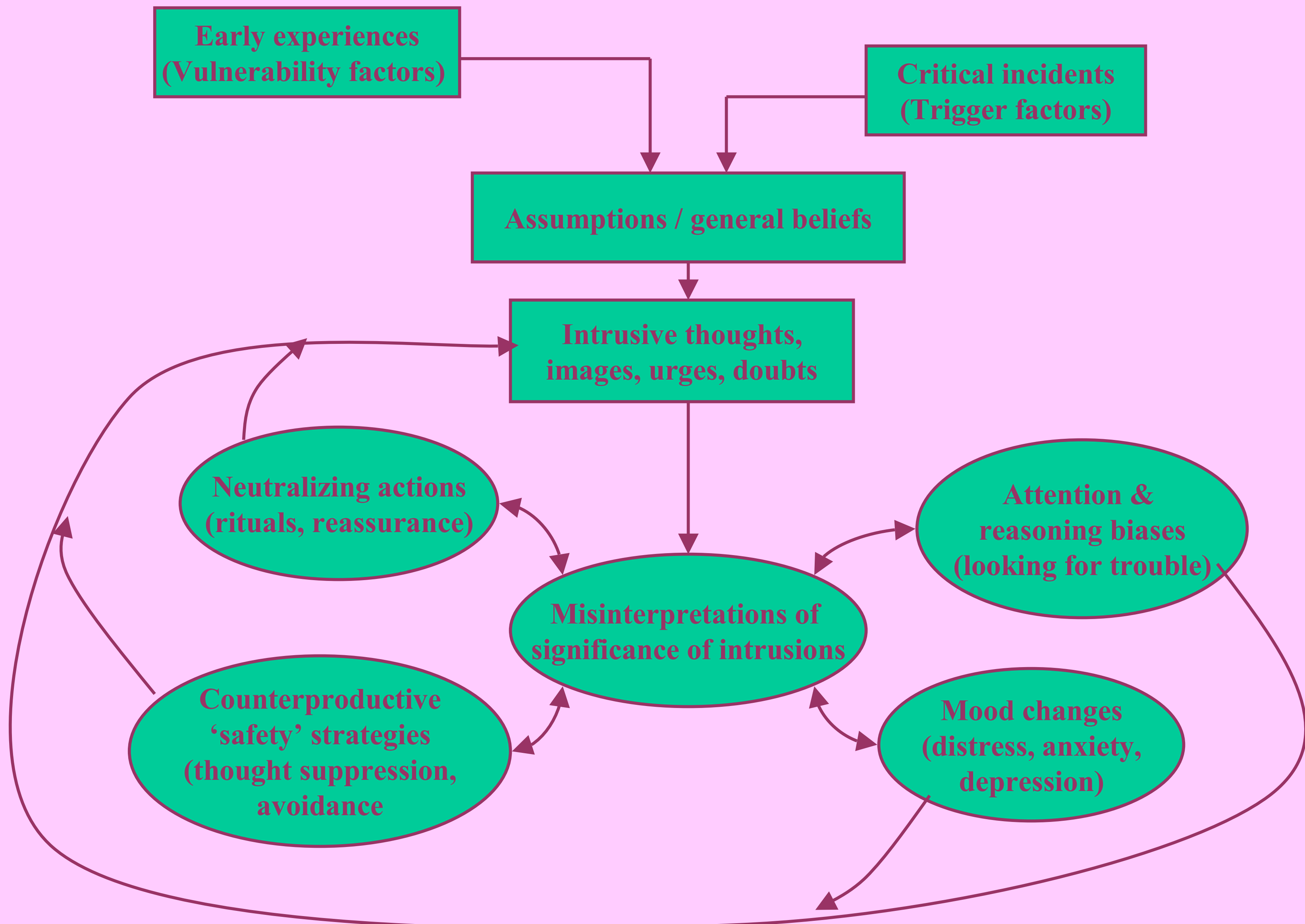
5. **The most plausible explanatory theory is tested for its generality.**

Assumptions underlying the case formulation approach *(adapted from Shapiro)*

1. At all times, the clinician must be willing and able to specify in operational detail his or her beliefs about a particular client.
2. These beliefs should be able to explain every symptom the client presents including their aetiology, and if valid should lead to a specific treatment.
3. These beliefs should also provide testable predictions of future client behaviour.
4. Experimental tests of these beliefs should be conducted to determine the validity of the clinician's thinking.
5. The clinician cannot realistically investigate every plausible theory and thus should test, at a minimum, the explanatory theory he/she has adopted for the particular client.
6. The clinician who provides experimental data to support his or her beliefs about a client has provided a more useful contribution than the clinician who operates on a belief without providing experimental support.
7. Such investigations can be viewed as pilot clinical research, since untenable hypotheses are eliminated by interview logic and not controlled experiments.

INTEGRATED SCHEMATIC MODEL of OCD AS AN EXEMPLAR OF A FRAMEWORK FOR CASE FORMULATION

(adapted from Salkovskis, Forrester, Richards and Morrison 1998)



Evaluating case formulations

- Attempts have been made to develop methods for evaluating the reliability and quality of case formulation
  - Demonstrable agreement on problem lists and on basic antecedent features
  - Less agreement on more complex aspects of factors influencing problems
- Several studies have been published on the quality and other features of case formulations
  - “Expert” clinicians produce more elaborate formulations
  - Proportion of formulations rates as “good enough” regarded by authors as disappointing

Does case formulation improve outcomes?

- Two studies have compared "formulation-driven" with "standardized" treatments:
  - Schulte *et al* (1992) study of phobias; no difference between two approaches
  - Emmelkamp *et al* (1994) study of OCDs: no initial difference, small but non-significant different at follow-up (6-months)
- Recent study by Persons et al (2006)
  - Studied cohort of clients treated with formulation-driven CBT; results comparable to those obtained in RCTs

Improving formulation:
recommendations of Tarrier & Calam (2002)

Suggestion to enhance case formulations by an additional focus on:

- Dysfunctional systems
- Stress-vulnerability factors
- Social/interpersonal environment