

Classification and Assessment in Clinical Psychology

Lecture Summary

- Classifying psychopathology
- Methods of assessment
- Case Formulation

Classification Systems

- Diagnostic and Statistical Manual
 - A medical model of illness
 - Most commonly used system for diagnosing mental health problems
 - Diagnoses based on the presence of a number of symptoms
- DSM-V published in 2013

- Advantages of DSM classification system
 - Simplicity of classification/definition
 - Dichotomous outcomes
 - Reliable diagnoses consistent within and across countries

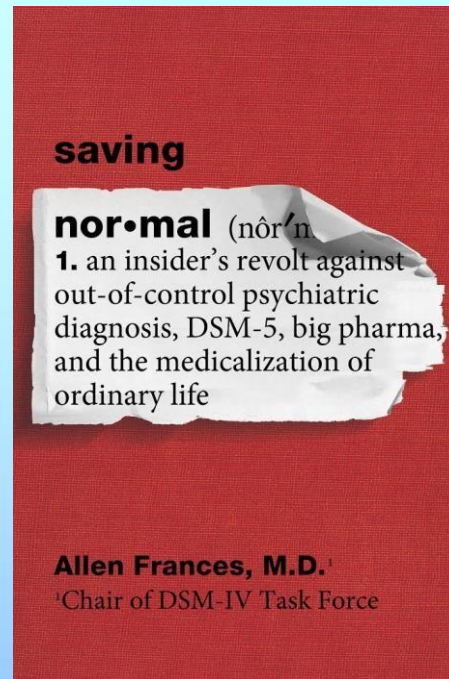
- Disadvantages of DSM classification system
 - Dichotomy difficult to sustain
 - Suggests mentally ill people have qualitatively different experiences
 - Little attention paid to individual's experience
 - Ignores social and psychological factors

Concerns over use of DSM classification system

- Diagnosis based upon such systems is not clear cut
- Validity of classifications questioned.
- Clinician biases
- Ignores cultural/societal differences – assumes “abnormality” is universal.

DSM-V: The Future of Psychiatric Diagnosis ?

- Publication of the fifth edition of *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) in 2013
- Massive controversy!
- Why?



[https://www.youtube.com/watch?
v=-AMvrcBvYWk](https://www.youtube.com/watch?v=-AMvrcBvYWk)

Methods of assessment

- Reliability
- Validity
 - Clinical interviews
 - Structured interviews
 - Psychological tests
 - Biologically-based assessments
 - Clinical observation
- Cultural bias in assessment

The reliability & validity of assessment methods

- *Reliability* is the extent to which an assessment will provide the same result when used by different clinicians
- *Validity* is the extent to which an assessment actually measures what it claims to be measuring

Reliability

- Test-retest reliability
- Inter-rater reliability
- Internal consistency
- Cronbach's α

Validity

- Test validity
- Concurrent validity
- Face validity
- Predictive validity
- Construct validity

The nature of clinical interviews

- Probably the first form of contact that a client will have with a clinician
- Questions relate to symptoms, client's past history, current living and working conditions
- Questions asked will depend on the theoretical orientation of the clinician
- Interviewer needs to develop a good rapport with the client

Structured interviews

- Structured interviews can be used to make decisions about diagnosis
- Structured Clinical Interview for DSM-IV-TR (SCID)
- Structured interviews provide good agreement on diagnosis between clinicians
- Can be used to determine overall levels of psychological and intellectual functioning (e.g. Mini Mental State Examination)

Standardised diagnostic tools

- Standardised semi-structured interview protocols can be used to systematically examine aspects of the individual's functioning and symptoms
- E.g. The Structured Clinical Interview for DSM-IV Axis 1 disorders.

Limitations of the clinical interview

- The reliability of clinical interviews is low
- Clients often have poor self-awareness so may not reveal important information in an interview
- Interviewers are prone to biases that affect the conclusions they draw (e.g. relying on first impressions)
- Some psychopathologies involve sufferers deliberately misleading or lying to interviewers

Psychological tests

- Personality inventories
- Specific trait inventories
- Projective tests
- Intelligence tests
- Neurological impairment tests

Psychological tests - introduction

- Assess the client on one or more specific trait (e.g. anxiety, IQ)
- Usually have rigid response and scoring requirements
- Scores can be *standardized* to provide *norms* that individuals can be compared with
- Most tests are checked to ensure they are reliable and valid
- Most tests are based on the psychometric approach

Personality inventories

- *Minnesota Multiphasic Personality Inventory* (MMPI) is the most popular
- Characteristics of the MMPI:
 - Has 567 items on 14 different measurement scales
 - Includes sub-scales that measure whether clients have been providing invalid information
 - Clinical scales include hypochondriasis, depression, paranoia, schizophrenia, etc.

Specific trait inventories

- Developed to measure functioning in one very specific area or psychopathology
- Obsessive Beliefs Questionnaire (OBQ) (Steketee et al., 2005) is one example
- Enable clinicians to measure characteristics that are not directly observable (i.e. *hypothetical constructs* such as *inflated responsibility* in OCD)

Projective tests

- Present a fixed set of stimuli that are ambiguous enough to allow a variety of interpretations
- Because they are open-ended, they are significantly less reliable and valid than more structured tests
 - Rorschach Inkblot Test
 - Thematic Apperception Test (TAT)
 - Sentence Completion Test



Card 1

Popular responses
bat, butterfly, moth



Card 2

Popular responses
two humans, four-
legged animal, dog,
elephant, bear



Card 3

Popular responses
two humans, human
figures



Card 4

Popular responses
animal hide, skin, rug



Card 5

Popular responses
bat, butterfly, moth



Card 6

Popular responses
animal hide, skin, rug



Card 7

Popular responses
human heads or faces



Card 8

Popular responses
animal: not cat or dog
four-legged animal



Card 9

Popular responses
human



Card 10

Popular responses
crab, lobster, spider
rabbit head,
caterpillars, worms,
snakes

Intelligence tests

- IQ tests are used by clinicians:
 - To diagnose intellectual and learning disabilities
 - To assess the needs of individuals with learning, intellectual or developmental disabilities
 - As part of a battery of tests to measure neurological impairment

Problems with IQ tests

- Because intelligence is a *hypothetical construct*, there is some doubt about what IQ tests measure
- Many IQ tests are culturally biased and based on limited views of what is adaptive
- IQ tests do not measure an individual's capacity to learn
- Current concepts of intelligence may be too narrow (what about musical ability or physical skill?)

Neurological impairment tests

- Designed to measure cognitive ability and cognitive deficits (e.g. memory or language deficits)
- Can determine whether deficits are the result of brain or neurological damage
- Used in addition to physiological measures such as EEG and brain scans such as PET or fMRI

Biologically based assessments

- Psychophysiological tests
- Neuroimaging techniques

Psychophysiological tests

- Psychopathology symptoms are associated with increased activity in the sympathetic nervous system including:
 - Heart rate
 - Blood pressure
 - Body temperature
 - Electro dermal responding

Electrodermal responding

- Measures sweat gland activity
- Also known as galvanic skin response (GSR) or skin conductance response (SCR)
- Can detect raised levels of anxiety or autonomic activity – especially in response to specific external stimuli (e.g. In specific phobias)

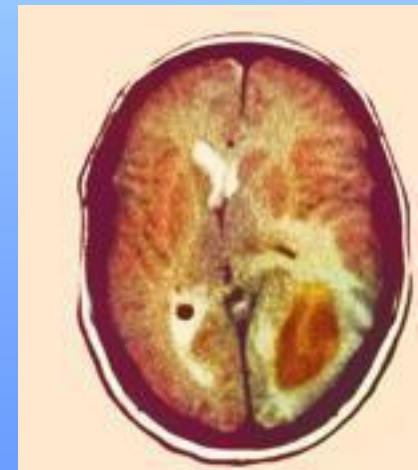
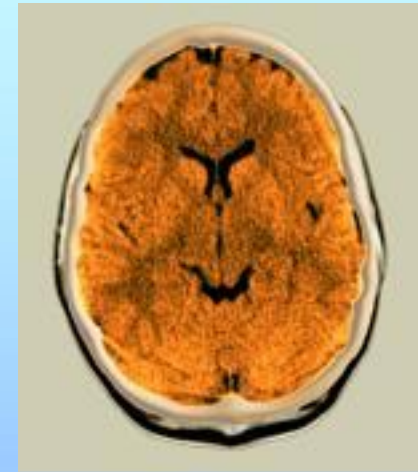
Other psychophysiological measures

- Electromyogram (EMG)
- Electrocardiogram (ECG)
- Electroencephalogram (EEG)
- Lie detectors

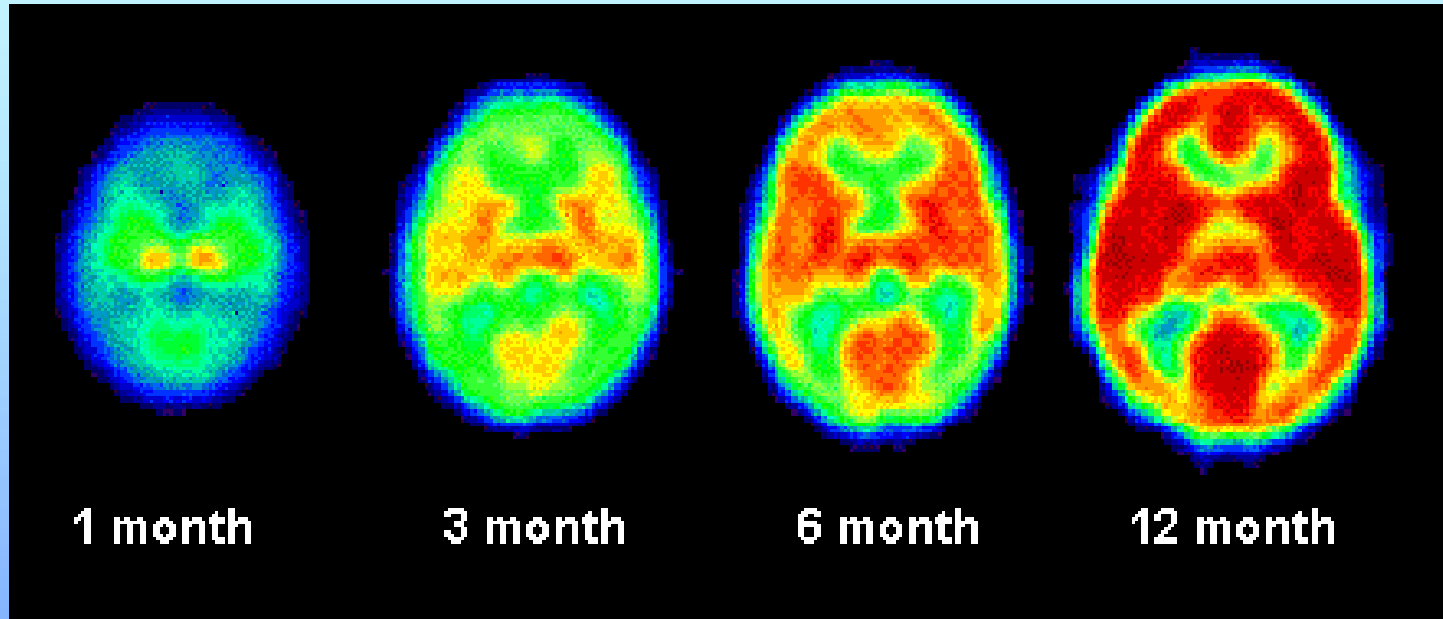
Neuroimaging techniques

- Computerized axial tomography (CAT)
- Positron emission tomography (PET)
- Magnetic resonance imaging (MRI)
- Functional magnetic resonance imaging (fMRI)

Computerized Axial Tomography (CAT)



Positron Emission Tomography (PET)

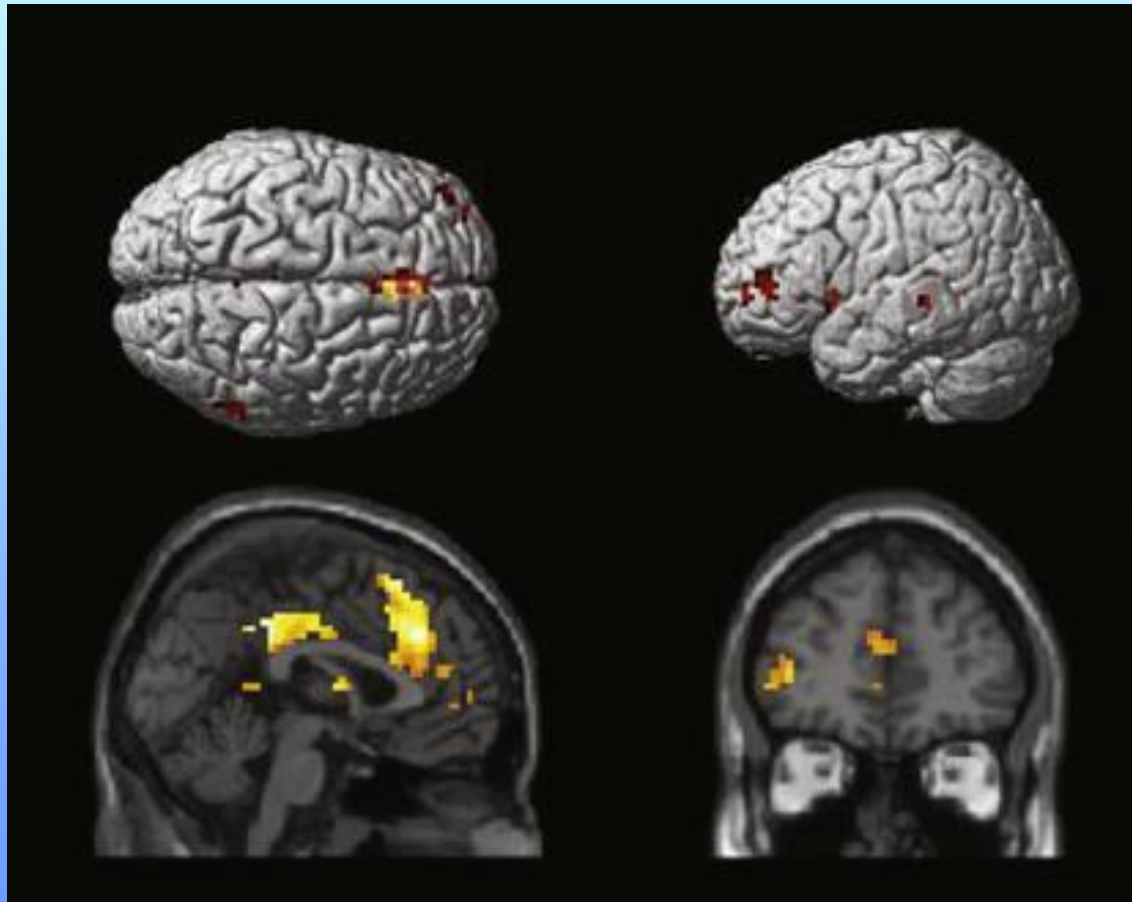


Source: The Crump Institute for Molecular Imaging, Department of Molecular & Medical Pharmacology, University of California at Los Angeles. Reproduced with permission

Magnetic Resonance Imaging (MRI)

A neuroimaging technique which involves the participant being placed inside a large circular magnet that causes the hydrogen atoms in the body to move. This produces an electromagnetic signal that is converted by the scanner's computer into visual pictures of the brain.

Functional Magnetic Resonance Imaging (fMRI)



Clinical observation

- Collecting clinical information by direct observation of a client's behaviour
- Provides information on:
 - The frequency of a behaviour
 - The context of events that precede a behaviour
 - The events that follow a behaviour (and so may reinforce it)

ABC charts

- ABC Charts measure:
 - A – The antecedents of behaviour
 - B – The behaviour itself (what the individual did)
 - C – The consequences of behaviour

Examples of observational coding forms

<u>Situation</u>	<u>Behaviour</u>	<u>Antecedents</u>	<u>Consequences</u>
Sitting in circle time 9:00 am	Slapped peer sitting immediately to his left with open hand	None observed	Peer and teacher both ignored
9:03 am	Yelled 'NO!' at teacher and remained seated	Teacher gave specific command for all students to return to their seats	Teacher ignored, students laughed
9:05 am	Got up and sat in seat	Peer came over to him and whispered in his ear	Teacher gave specific, labelled praise to target child

<u>Behaviour</u>	<u>Frequency</u>
Fidgeting in seat	IIII
Getting out of seat	III
Running around classroom	I
Interrupting others	IIII
Physical aggression toward peers	I
Physical aggression toward teachers	
Verbal threats of aggression toward peers	II
Verbal threat of aggression toward teachers	I

Examples of observational coding forms (Cont'd)

Behaviours	30"	1'	30"	2'	30"	3'	30"	4'	30"	5'	30"	6'	30"	7'	30"	8'	30"	9'	30"	10'
Inappropriate Movement	✓				✓															
Inattention			✓	✓					✓	✓						✓	✓	✓	✓	✓
Physical Aggression	✓	✓																		
Self-Injurious Behaviour						✓	✓							✓						
(continued)																				

Target Behaviour	Antecedents	Consequences						Comments
		Teacher +	Teacher -	Teacher 0	Peer +	Peer -	Peer 0	
Physical Aggression	Teacher left room Child took his toy		I	IIIII	IIIII I			
	None observed			I	I			
Positive Social Interaction	Teacher specific prompt			IIII			IIII	
	None observed			III			III	
(continued)								

Self observation or self monitoring

- Clients observe and record their own behaviour
- Can use a diary or palm-top computer for this purpose
- Clients note when certain behaviours or thoughts occur and note their context
- Enables data to be collected in real time and overcomes problems of poor recall
- Often known as *ecological momentary assessment (EMA)*

Cultural biases in assessment

- Most assessments have been developed on white American or white European populations
- Therefore, many tests may be culturally biased
- Clinicians need to be aware of these biases in their judgments and diagnoses

Examples of cultural anomalies

1. Some ethnic groups score differently on assessment tests than others
2. Black Americans have a higher rate of diagnosis of disorders such as alcoholism and schizophrenia than white Americans
3. Many clinicians tend to assess clients from low socioeconomic backgrounds as more disturbed than those from higher socioeconomic groups

Causes of cultural anomalies

- Mental health symptoms may manifest differently in different cultures
- Language differences between clinician and client can affect diagnosis
- Cultural differences in religion and spiritual beliefs can affect the expression of psychopathology
- Cultural differences can affect client-clinician relationships
- Cultural stereotypes can affect the perception of what is 'normal' behaviour in ethnic groups

Addressing cultural anomalies

- DSM has made some attempt to identify potential cultural anomalies in diagnosis
- Clinicians need proper education and training when assessing and diagnosing minority persons (Hall, 1997)
- Structured interviews should be used that make assessment methods more valid and reliable (Aklin & Turner, 2006)

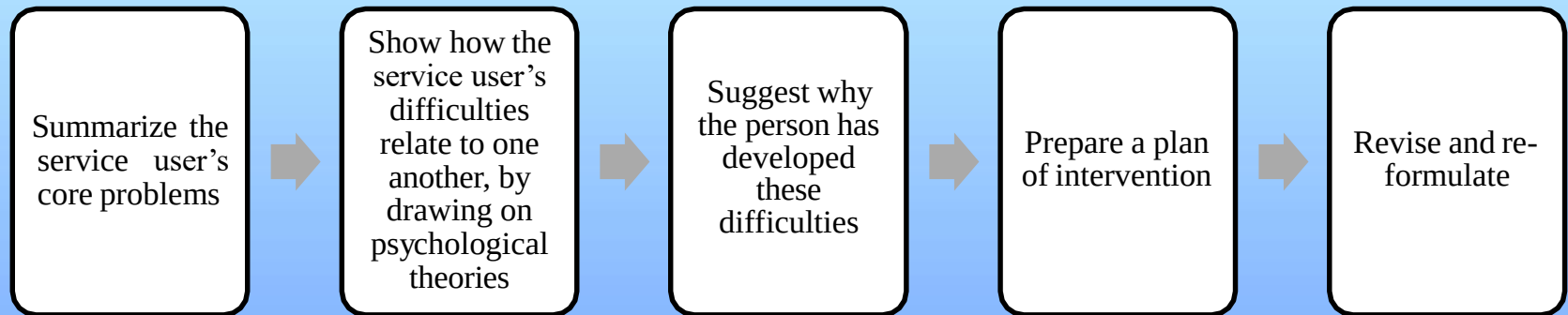
Case Formulation

- Attempt to identify the processes that lead to/maintain specific behaviours
- An explanatory hypothesis about the nature of an individual's problem
- Guided by the theoretical perspective of the therapist
- Help create a treatment plan and enable the effectiveness of that plan to be evaluated.

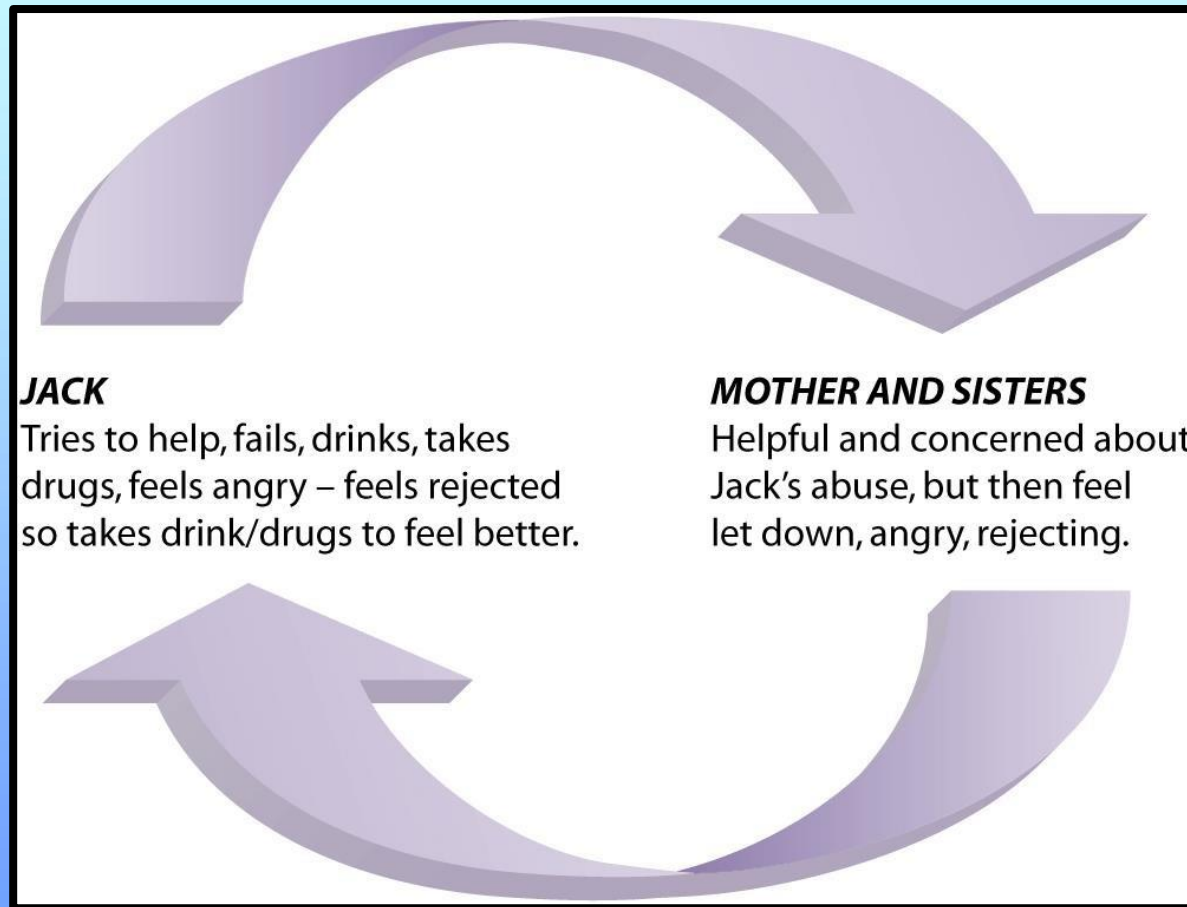
Case Formulation

- “The use of clinical information to draw up a psychological explanation of the client’s problems and to develop a plan for therapy.” (Davey, 2014, p. 64)
- The use of clinical information to draw up a psychological explanation of the client’s problems and to develop a plan for therapy
- Construction of formulation dependent on clinician’s theoretical orientation

Case Formulation

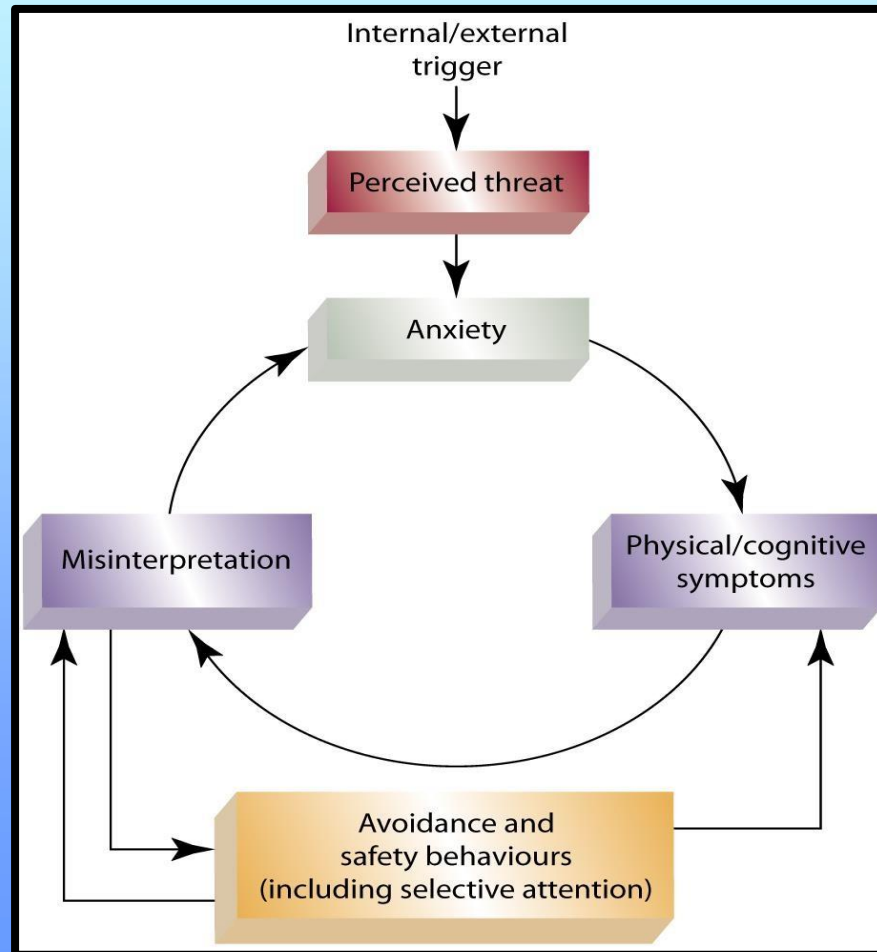


A systemic case formulation



Source: Dallos, R. & Stedmon, J. (2006). Mapping the family dance. In L. Johnstone & R. Dallos (eds.), Formulation in psychology and psychotherapy. London: Routledge. Reproduced with permission.

A cognitive - behavioural formulation for panic disorder



e.g. A CBT-based formulation

(Bennett, 2011)

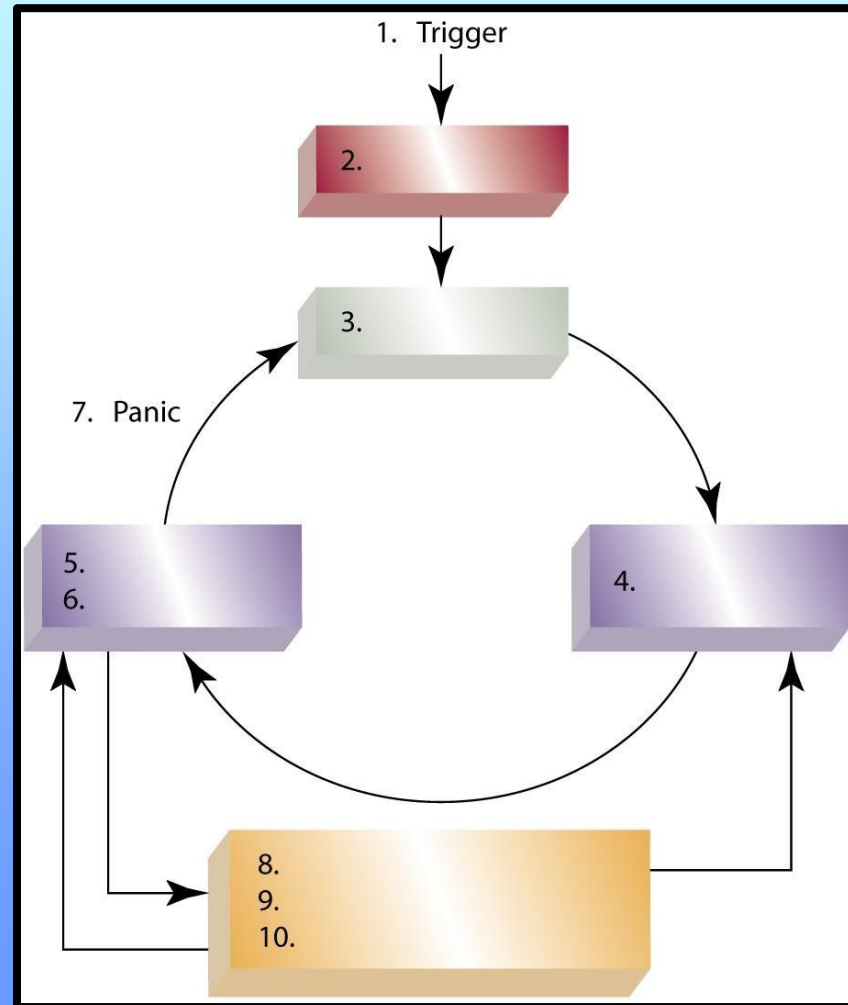
- What is troubling the individual?
- What factors have left them vulnerable to any problems they are now experiencing?
- Why have they developed problems now?
- What thoughts are they experiencing that are maintaining their problems?
- What behaviours are they engaged in that are maintaining their problems?

e.g. A CBT-based formulation

(Bennett, 2011)

- Presenting problems
- Predisposing factors
- Precipitating factors
- Perpetuating cognitions & behaviours

Template formulation diagram for panic disorder



Case Formulation

BUT:

- *would e.g. A humanistic therapist approach a formulation in the same way?*
- *would a therapist be biased in the things they focus on/choose to treat?*
- *Is a “good therapist” one who show awareness of different models? E.g. A transtheoretical approach*

Advantages of case formulation (Tarrier, 2006)

- Allows flexible understanding of each individual client's problems
- It is collaborative and treats the client with regard
- Firmly based on a theoretical understanding of psychopathology
- Can include information about a client's past history
- It allows the development of treatment strategies moulded to the needs of the individual client

The relationship between patient and therapist

- Close personal relationships form the foundation of treatment/psychological intervention
- E.g: it is specifically in the area of establishing and maintaining such relationships that borderline patients experience their greatest difficulty.

Treatments & Interventions

- Potential treatments for psychological disorders:
 - Biological treatments:
 - drug therapy/pharmacotherapy
 - Electroconvulsive therapy
 - Surgery
 - Herbal Medicine
 - Psychological treatments:
 - Psychotherapy: Cognitive, CBT, Humanistic approaches
 - Family systems therapy
 - Interpersonal therapy
 - Relative effectiveness of drug therapy versus psychotherapy is a subject of growing research