

Cognitive Models of Psychopathology

Will Stageman ST5 Regional Affective Disorders Service

Outline

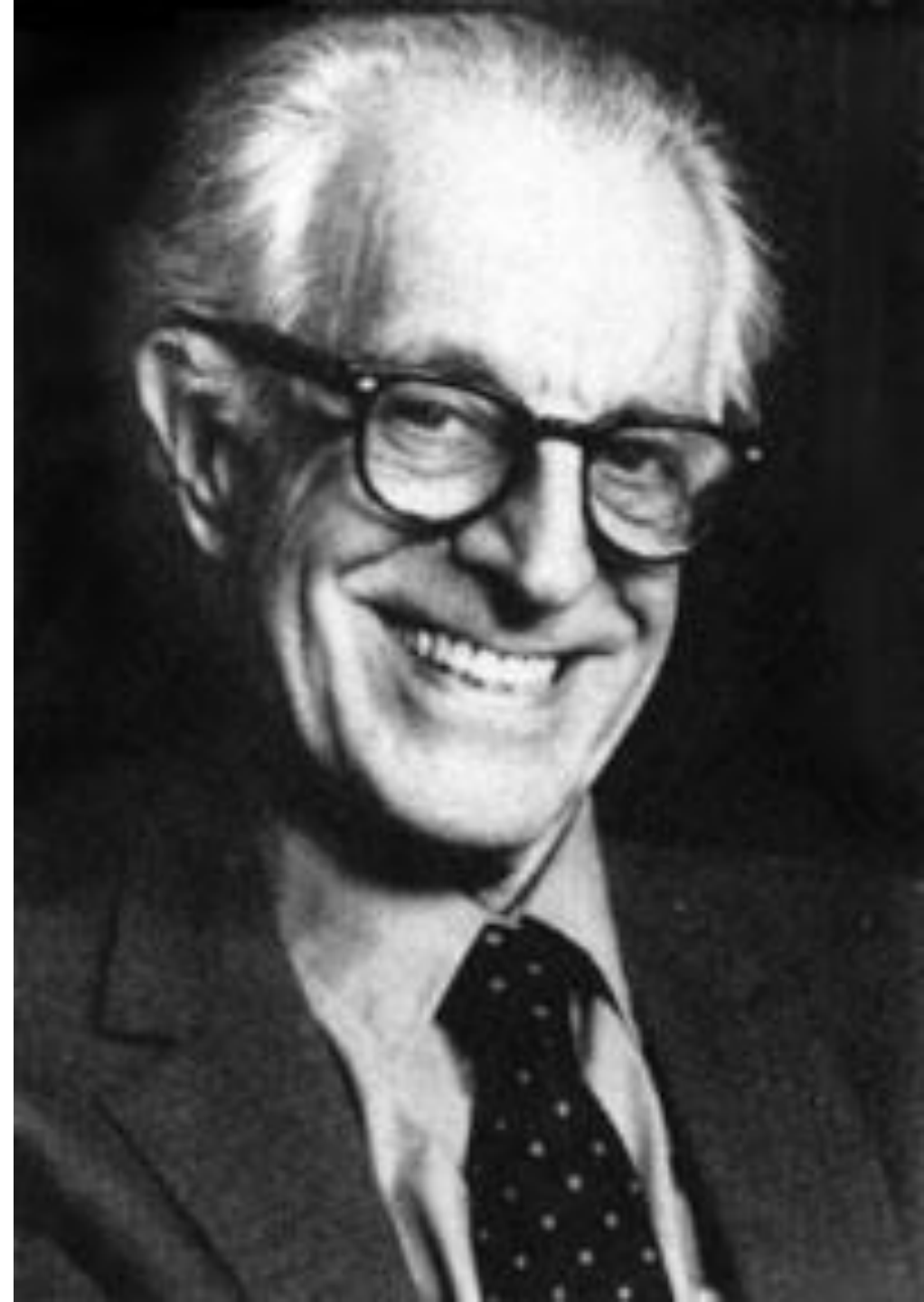
- Conceptual models in psychiatry
- The three waves of psychotherapy
- Albert Ellis and Rational Emotional Therapy
- Aaron Beck and Cognitive Therapy
- Cognitive models of psychopathology
- Automatic thoughts and cognitive distortions
- Formulation
- Therapy using the Cognitive Model
- Mindfulness-Based Cognitive Therapy
- MCQs and EMIs
- Unifying the models

Models of Psychopathology

- Disease
 - Mental pathology is accompanied by physical pathology and can be categorised as different disorders which each have common symptoms
- Psychodynamic
 - There is a constant interplay (“dynamic”) of unconscious complicated feelings influencing our relationships and an imbalance results in emotional disorder
- Behavioural
 - Behaviour constitutes the main feature of mental illness and the persistence of behaviours can be understood through learning theory
- Social
 - Mental disorder is triggered by life events and social forces linked to class, occupational status and social role are the precipitants of mental disorder
- Evolutionary
 - Human adaptations were forged to function in past environments rather than the current environment
- Cognitive
 - Mental disorder is created about by errors of thinking and it is the dysfunctional thinking of the patient in response to stimuli that creates mental disorder

Albert Ellis

- 1913 – 2007
- Pittsburg
- Mother suffered bipolar
- Repeated hospitalised
- Bronx Botanical Gardens
- Influenced heavily by Stoicism
- Personal philosophies contain beliefs that contribute to personal pain



The three waves of psychotherapy

Wave	One	Two	Three
Characteristics	Past-orientated Trauma and early life experiences Therapist as expert	Present- orientated Problem focussed Collaborative	Present and future- orientated Causes less relevant Collaborative
Therapies	Psychodynamic Psychoanalytic	Behavioural Cognitive Family	DBT MBCT CFT

Rational Emotive Behaviour Therapy (REBT or RET)

Albert Ellis; mid-1950s

A Adversity

B Belief

C Consequences

D Dispute the evidence

E Effective new philosophy

F Feelings and behaviours

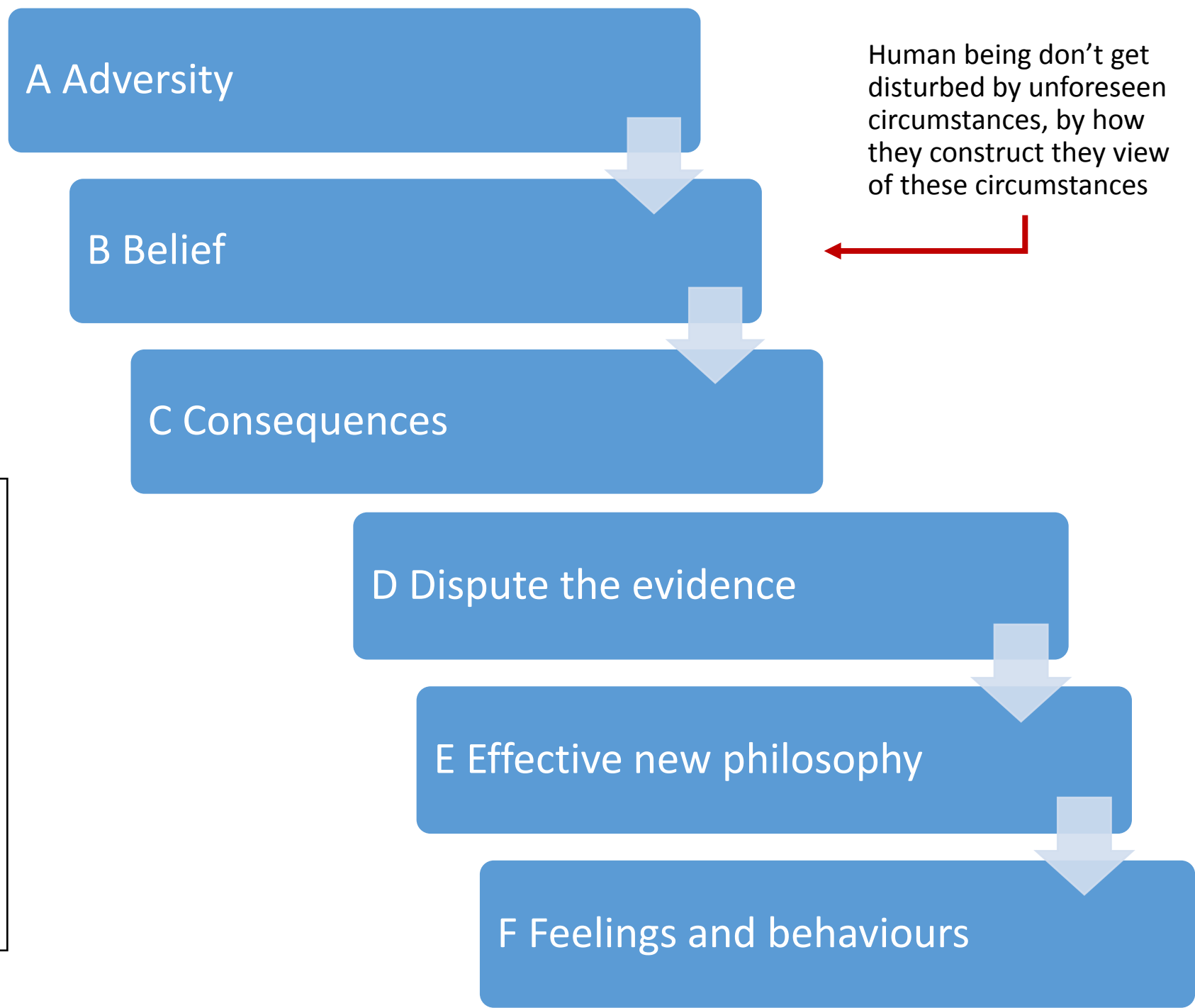
Human beings don't get disturbed by unforeseen circumstances, by how they construct their view of these circumstances

Differences between CT and RET

CT believes each disorder has its own cognitive profile

RET focuses on "should and musts" that are the foundation of all disorders

CT is collaborative, RET is direct and confrontational



<p><i>"I absolutely MUST, under practically all conditions and at all times, perform well (or outstandingly well) and win the approval (or complete love) of significant others. If I fail in these important—and sacred—respects, that is awful and I am a bad, incompetent, unworthy person, who will probably always fail and deserves to suffer."</i></p>	<p><i>"Other people with whom I relate or associate, absolutely MUST, under practically all conditions and at all times, treat me nicely, considerately and fairly. Otherwise, it is terrible and they are rotten, bad, unworthy people who will always treat me badly and do not deserve a good life and should be severely punished for acting so abominably to me."</i></p>	<p><i>"The conditions under which I live absolutely MUST, at practically all times, be favourable, safe, hassle-free, and quickly and easily enjoyable, and if they are not that way it's awful and horrible and I can't bear it. I can't ever enjoy myself at all. My life is impossible and hardly worth living."</i></p>
<p>Holding this belief when faced with adversity tends to contribute to feelings of anxiety, panic, depression, despair, and worthlessness.</p>	<p>Holding this belief when faced with adversity tends to contribute to feelings of anger, rage, fury, and vindictiveness.</p>	<p>Holding this belief when faced with adversity tends to contribute to frustration and discomfort, intolerance, self-pity, anger, depression, and to behaviours such as procrastination, avoidance, and inaction.</p>
<p>Accept that you are inherently flawed and imperfect</p>	<p>Accept that others are inherently infallible and imperfect. Accept their humanity, if not always agreeing with their behaviours.</p>	<p>Accept that life has hassles and difficulties that are not always in accordance with your wants.</p>

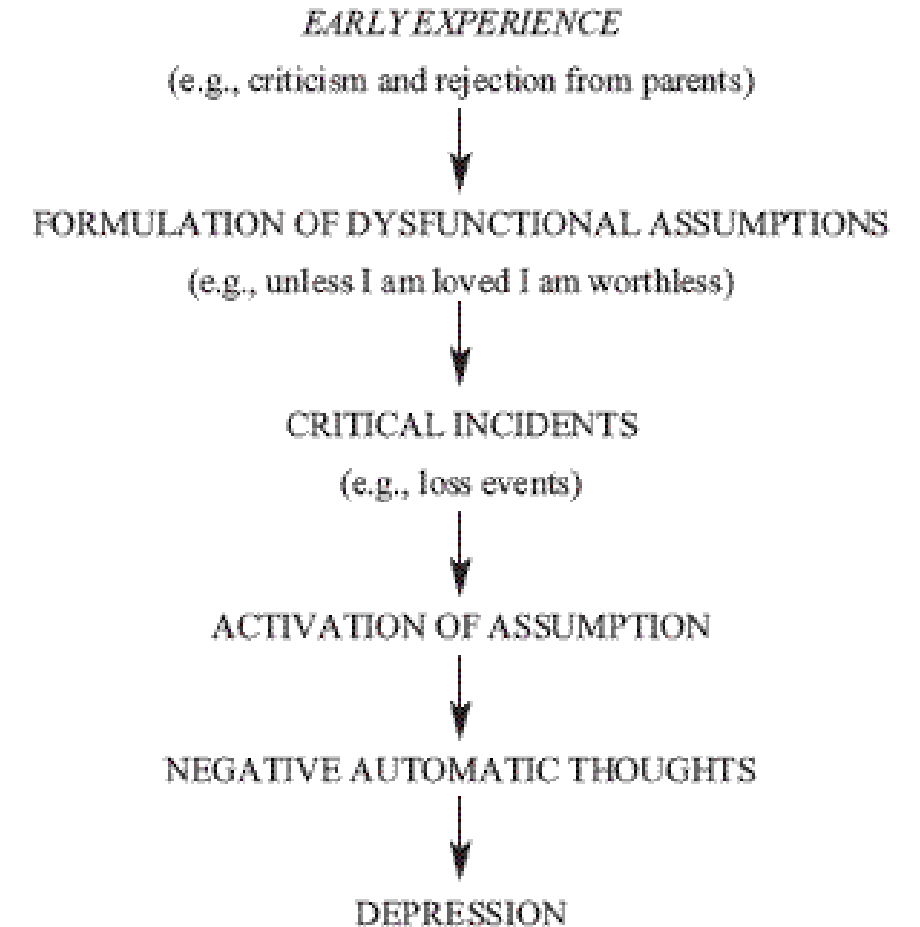
Aaron Beck

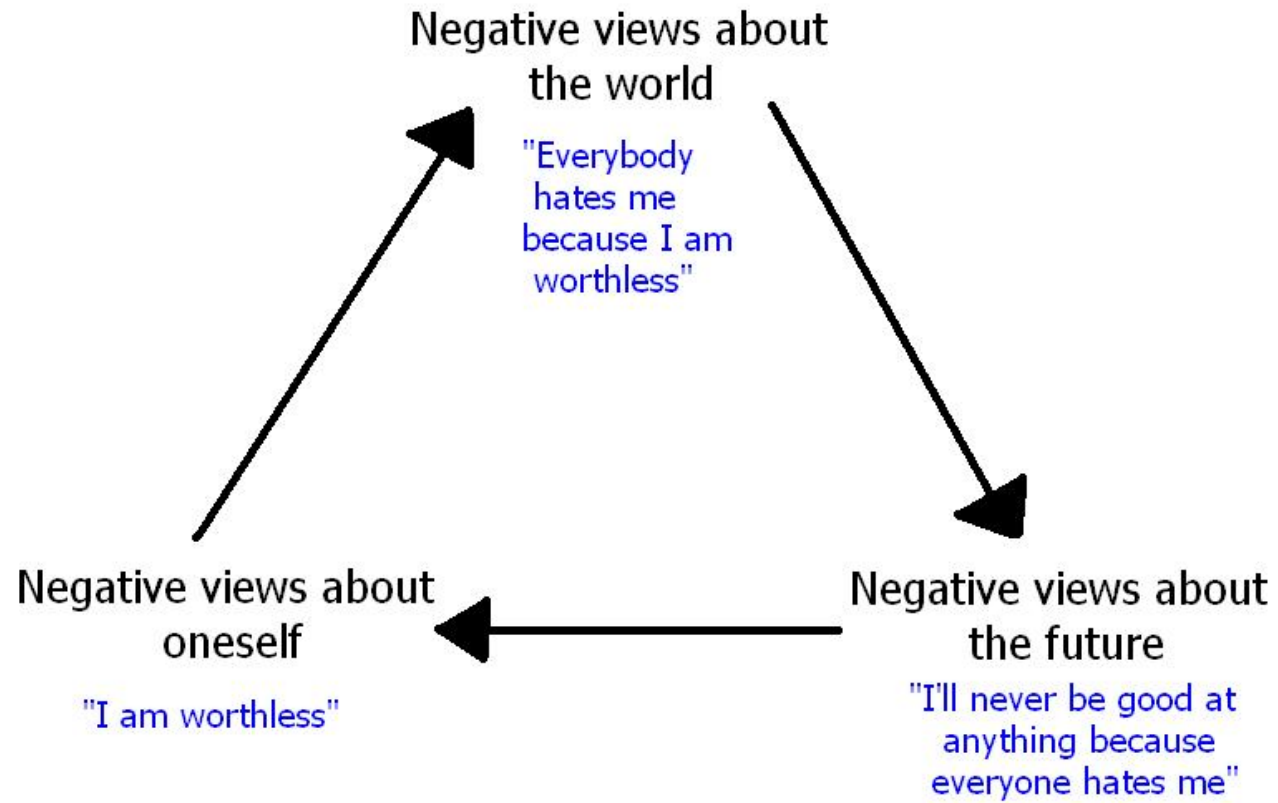
- 1921 - present
- Rhode Island
- Two elder siblings died in 1919 during influenza pandemic
- Mother severely depressed
- He broke his arm and had an extended absence from school
- Held back, believed himself to be unintelligent, later surpassed his peers
- Suffered periods of depression and anxiety
- Began by attempting to prove Freud's theory of depression as retroflected hostility (“anger turned on oneself”)
- He wrote *Cognitive Therapy and the Emotional Disorders*
- [Aaron Beck on Cognitive Therapy](#)



Cognitive Model of Depression

- Human beings survive because we have an information processing system which takes into account relevant information from the environment and synthesises that information to formulate a plan. These information processing systems are called schemas.
- Schemas are acquired early in childhood and act as “filters” through which information is processed.
- Depressed people develop a negative self-schema (core beliefs) of the world in childhood and adolescence, perhaps because of a loss of a parent, criticism from teachers or rejection by peers.
- When they encounter a situation which resembles the original negative schema, depression ensues.





Cognitive triad model

Model of Panic

Internal/External
Trigger



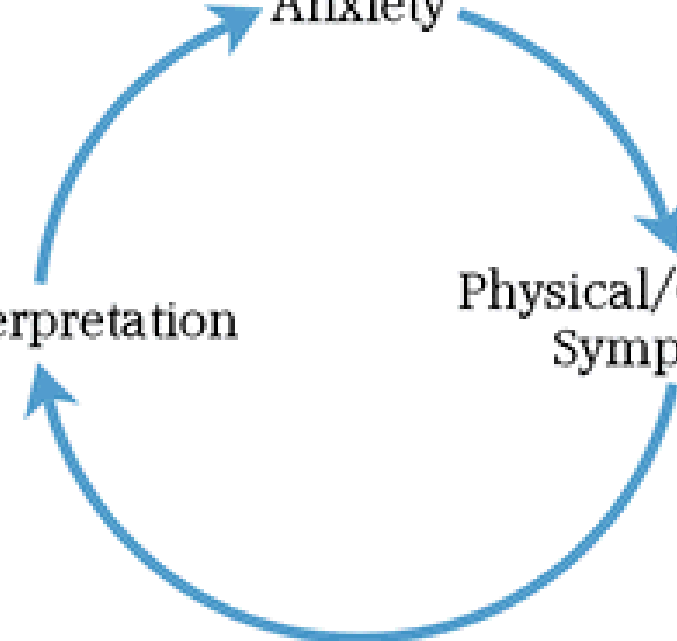
Perceived Threat



Anxiety

Misinterpretation

Physical/Cognitive
Symptoms



Cognitive Model of Anxiety Disorders

Excessive functioning or
malfunctioning of normal survival
mechanisms

Cope with threat by utilising
physiological responses to prepare
our bodies for escape or self-defense

Anxious individuals have an
exaggerated sense of danger based
on false assumptions

In anxiety disorders, thoughts centre
of themes of danger, while minimising
the ability to cope.

Cognitive Model for Mania

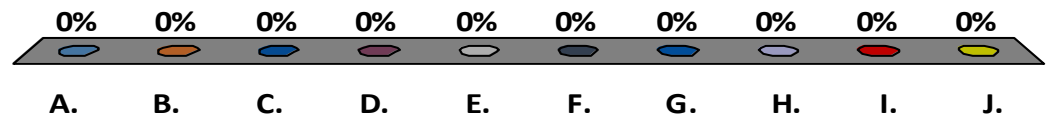
- Opposite of depression
- Selectively perceive gains in each experience, while disregarding or reinterpreting negative events as positive
- Exaggerated perceptions of their own abilities leads to a sense of euphoria
- Inflated view of yourself, others and the future

Automatic Thoughts

- Thoughts that occur at the fringe of awareness that occur spontaneously and rapidly, giving an immediate interpretation of the situation
- Generally accepted as plausible, and people are not immediately aware of them
- When pathological, they are termed “negative automatic thoughts” or “cognitive distortions”

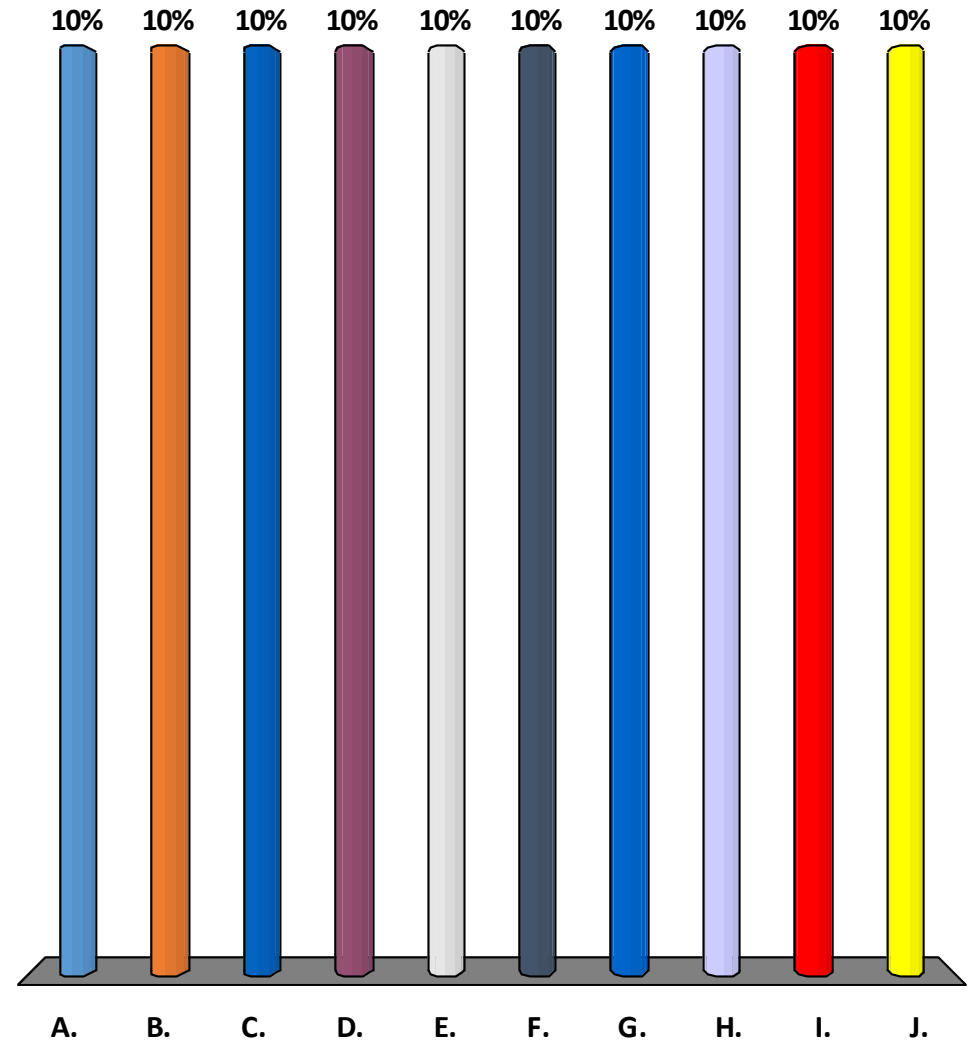
“He didn’t want to go out with me, I’ll always be lonely.”

- A. Overgeneralisation
- B. Selective Abstraction (filtering)
- C. Dichotomous Reasoning (all or nothing thinking)
- D. Personalisation
- E. Catastrophizing
- F. Emotional Reasoning
- G. Mind reading
- H. Fortune telling
- I. Magnification
- J. Minimisation



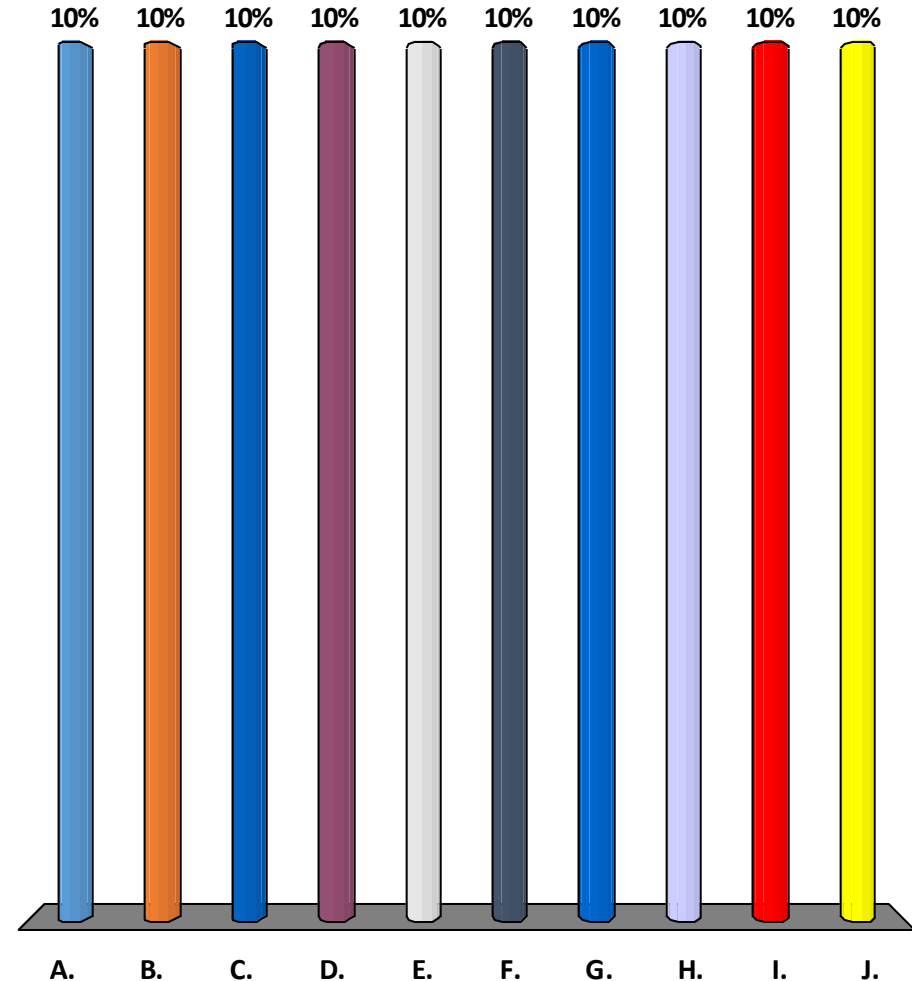
“Mavis is in a rubbish mood. It’s clearly something I did.”

- A. Overgeneralisation
- B. Selective Abstraction (filtering)
- C. Dichotomous Reasoning (all or nothing thinking)
- D. Personalisation
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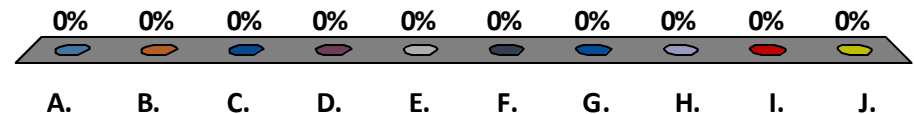
“What if I haven’t turned the iron off and the house burns down”

- A. Overgeneralisation
- B. Selective Abstraction (filtering)
- C. Dichotomous Reasoning (all or nothing thinking)
- D. Personalisation
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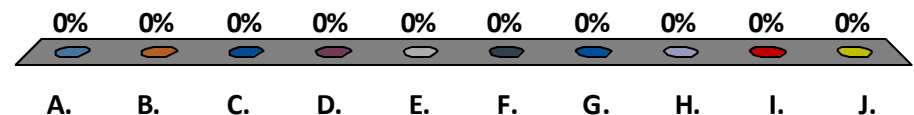
“It’s not going to work out so there’s not much point even trying.”

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- C. Dichotomous Reasoning (all or nothing thinking)
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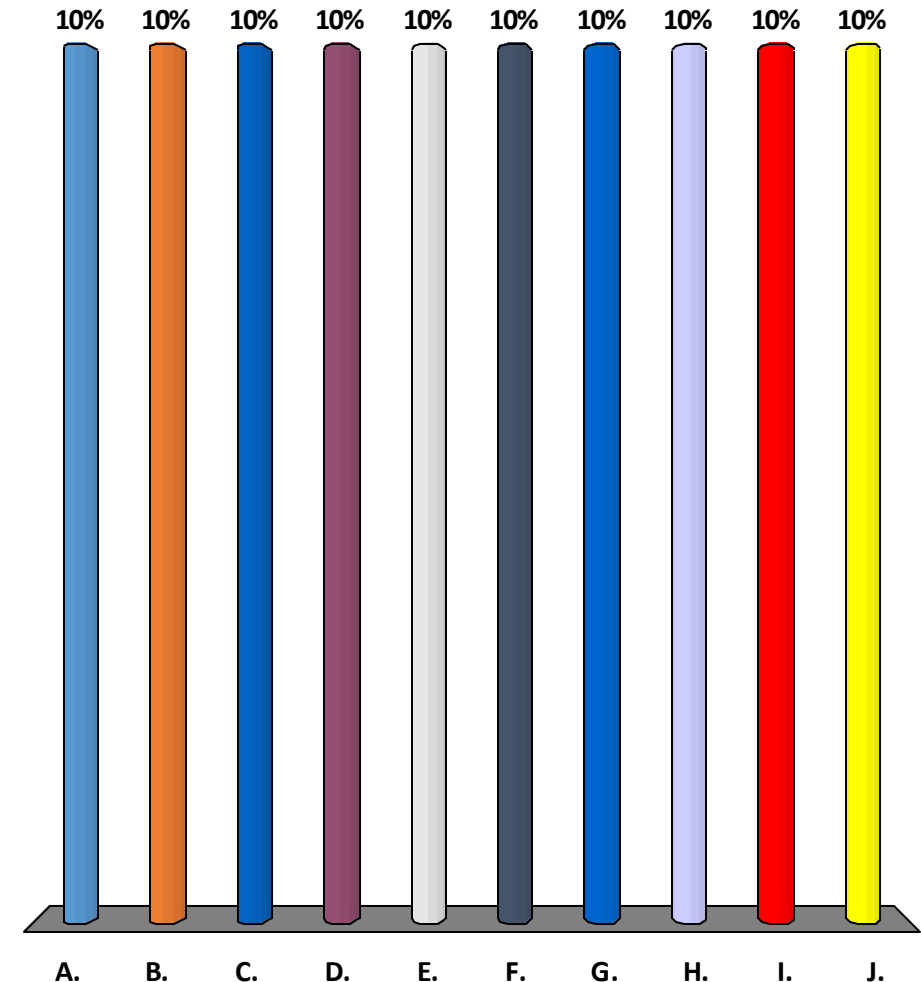
“I feel scared about flying, therefore it’s obviously dangerous”

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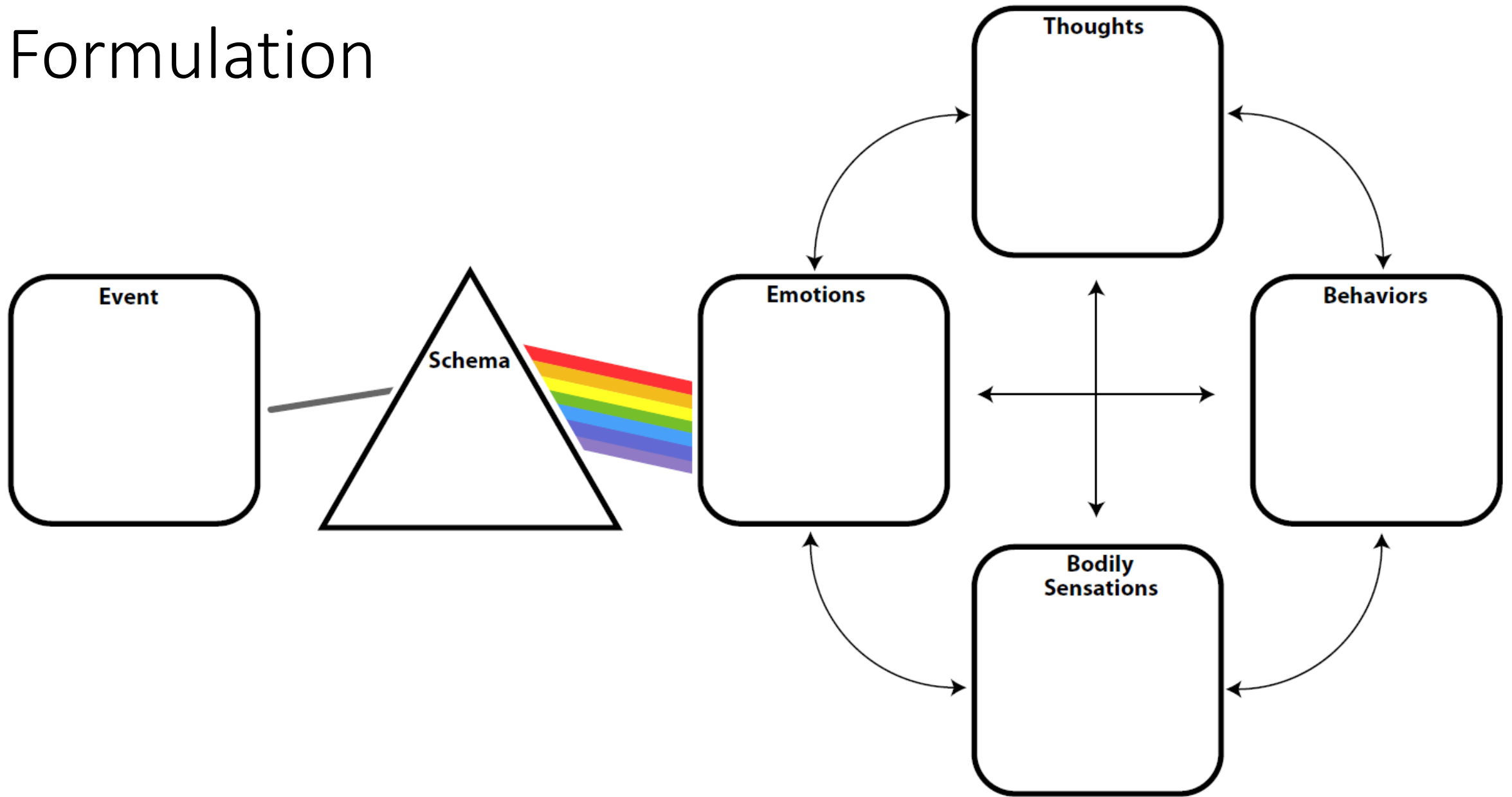


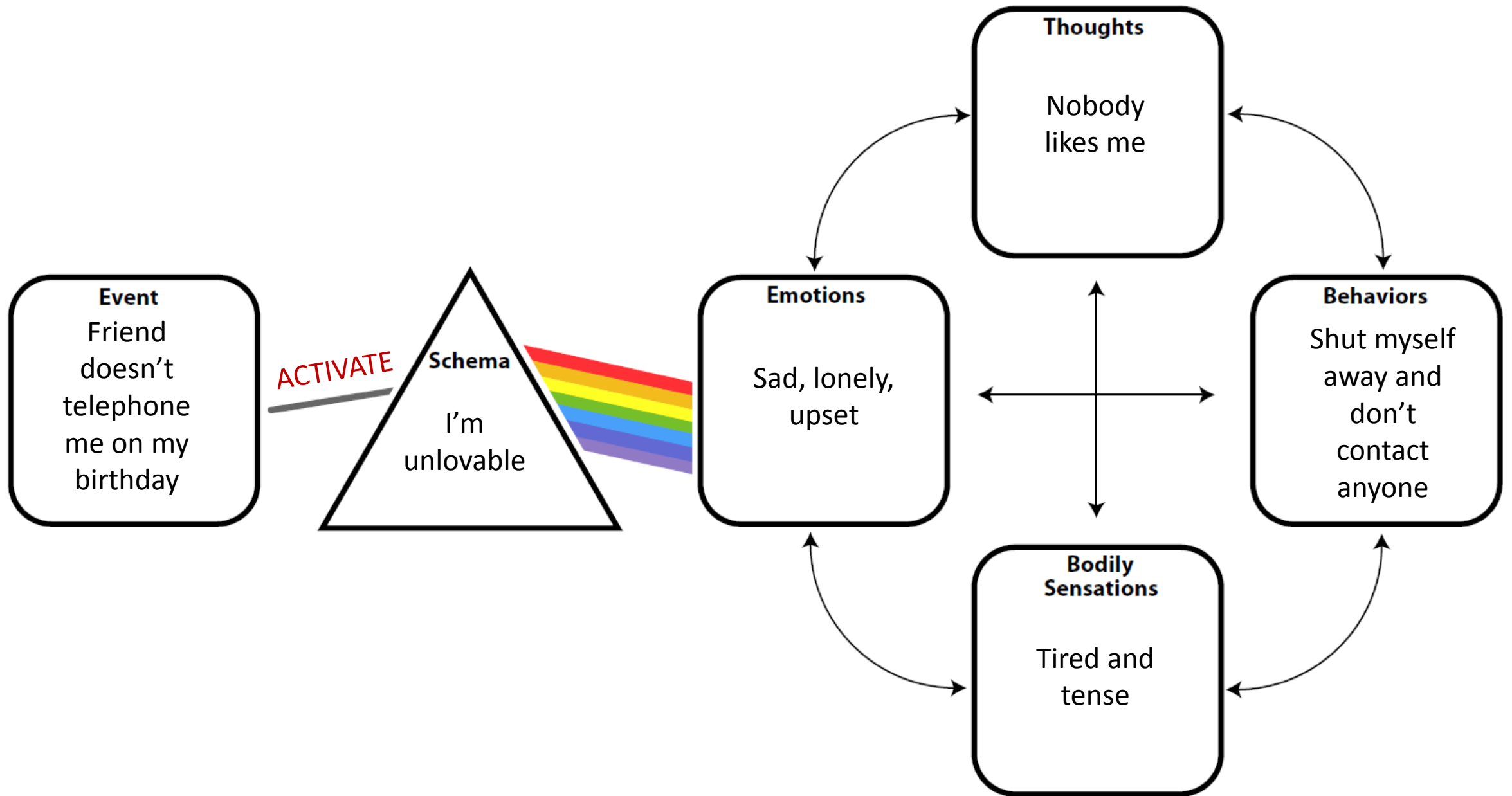
“I misplayed one key, the whole recital was ruined”

- A. Overgeneralisation
- B. Selective Abstraction (filtering)
- C. Dichotomous Reasoning (all or nothing thinking)
- D. Personalisation
- E. Catastrophizing
- F. Emotional Reasoning
- G. Mind reading
- H. Fortune telling
- I. Magnification
- J. Minimisation



Formulation





Event
Friend
doesn't
telephone
me on my
birthday

ACTIVATE

Schema
I'm
unlovable

Emotions
Sad, lonely,
upset

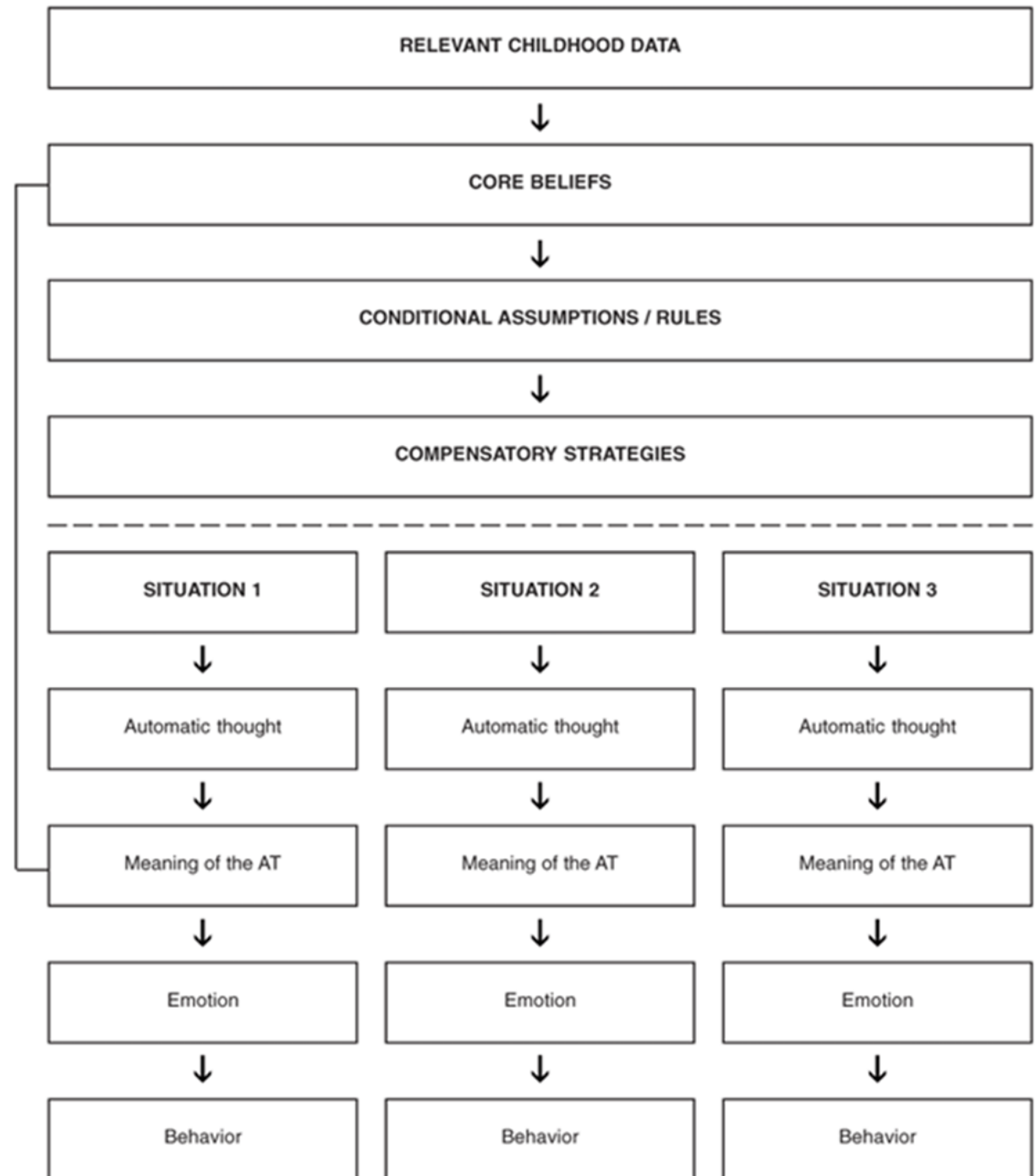
Thoughts
Nobody
likes me

**Bodily
Sensations**
Tired and
tense

Behaviors
Shut myself
away and
don't
contact
anyone

Cognitive Conceptualization Diagram

Judith Beck (1993)



Parental neglect and criticism

I'm unlovable

If others show me care, they must have an ulterior motive

Be independent and you'll be safe

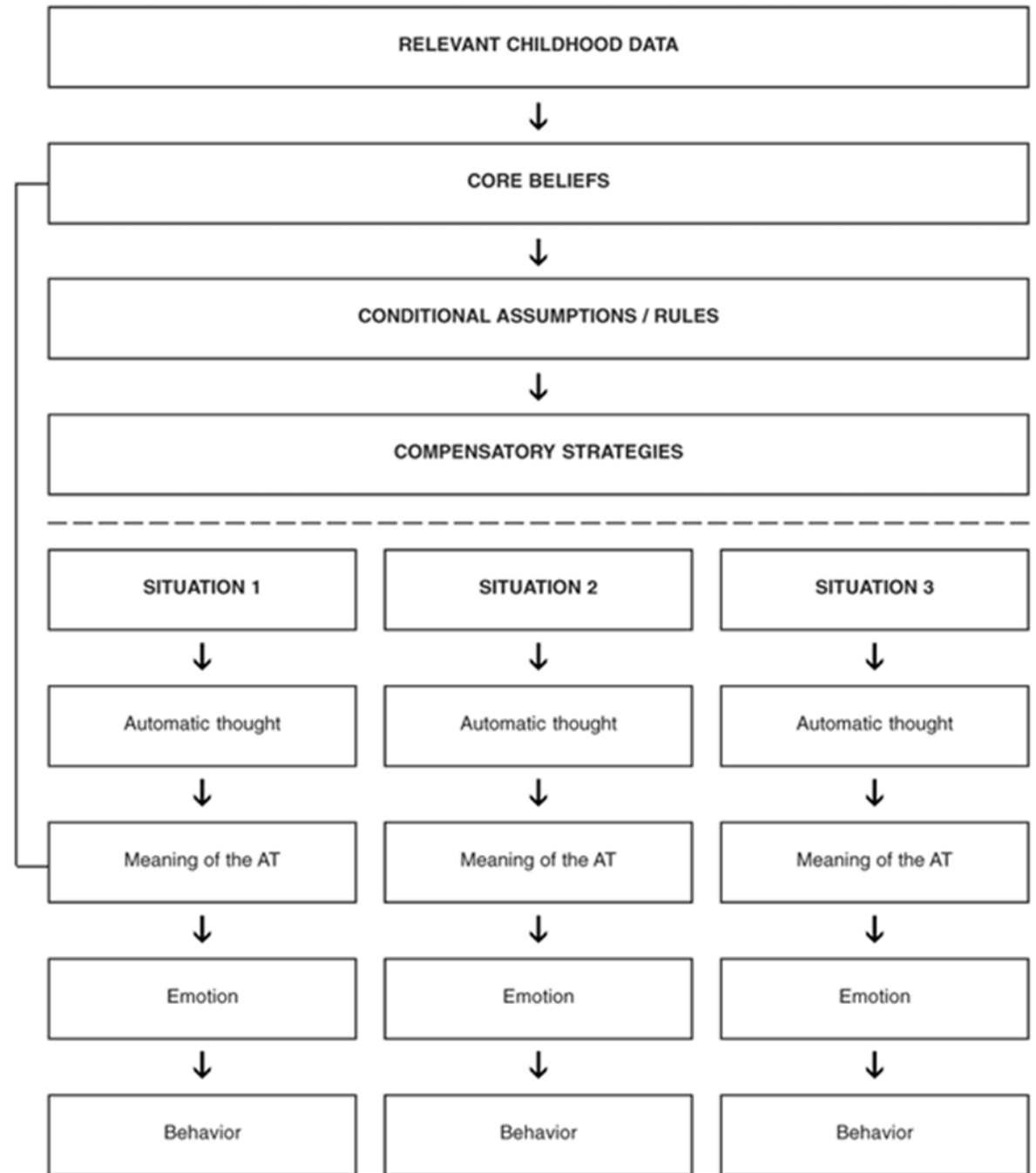
Partner says "I need time to be with my friends"

"He's losing interest"

"He's going to break up with me"

Sadness, worry and anger

Seek reassurance, demand he stays in



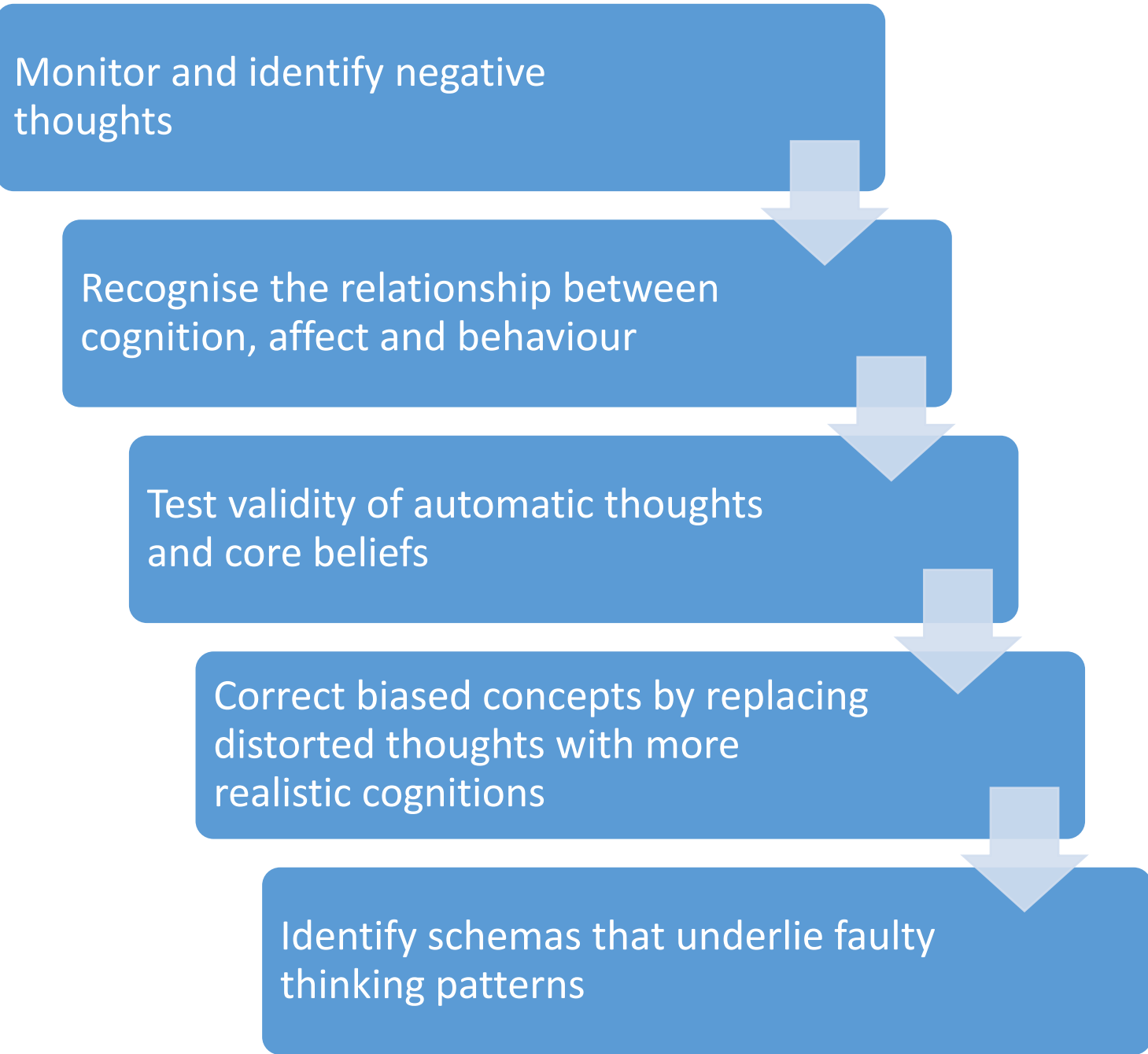
The Therapeutic Process

A therapeutic process called *collaborative empiricism*

Patient and therapist work as a team of scientists evaluating the patients beliefs, testing them out to see whether they are accurate or not and modifying them according to reality

Therapist uses Socratic questioning to guide the patient to develop insight over distorted thinking, this is termed *guided discovery*

Monitor and identify negative thoughts

A vertical flowchart consisting of five blue rectangular boxes with rounded corners, connected by downward-pointing arrows. The boxes are arranged from top to bottom, each containing a step of the therapeutic process. The steps are: 1. Monitor and identify negative thoughts; 2. Recognise the relationship between cognition, affect and behaviour; 3. Test validity of automatic thoughts and core beliefs; 4. Correct biased concepts by replacing distorted thoughts with more realistic cognitions; 5. Identify schemas that underlie faulty thinking patterns.

Recognise the relationship between cognition, affect and behaviour

Test validity of automatic thoughts and core beliefs

Correct biased concepts by replacing distorted thoughts with more realistic cognitions

Identify schemas that underlie faulty thinking patterns

The Three-Question Socratic Technique

1. What is the evidence for the belief?
2. How else might you interpret the situation?
3. If it is true what are the implications?

Dysfunctional thoughts record

Instructions: When you notice your mood getting worse, ask yourself: *What is going through my mind right now?* And as soon as possible jot down the thought or mental image in the Automatic thought column. Identify, then, what emotions, feelings or mood state you felt when you had this thought. Then, check out how realistic or true these thoughts are and build a more rational answer, with alternative thoughts more appropriate to the situation. Assess how much has changed your original thought and feeling.

Situation Specify the situation, what happened? Where were you, what were you doing? Who was involved?	Automatic thought Which thoughts and/or images did you have in your mind in that situation? Highlight the most important thought or the one which most troubled you. If possible, assess how much do you believe in each of the thoughts (0-100%).	Emotion Which feelings or emotions (sadness, anxiety, anger etc.) did you feel in that situation? If possible, assess the intensity of each emotion (0-100%).	Adaptive answer Use the questions below to compose the answers to the automatic thoughts. If possible, assess how much do you believe in each alternative answer. Which are the possible cognitive distortions (see list of Cognitive Distortions) you have done?	Result Assess how much do you believe now in your automatic thoughts (0-100%) And in the intensity of your emotions (0-100%).

In order to build the alternative answer, do the questions:

1. What is the **evidence** that the automatic thought is true? What is the evidence it is not true?
2. Are there **alternative explanations** for the event or **alternative ways** of seeing the situation?
3. Which are the implications, in case the thoughts are true? What is the worst thing of the situation? What is the most realistic one? What you may do about it?

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Situation Specify the situation, what happened? Where were you, what were you doing? Who was involved?	Automatic thought Which thoughts and/or images did you have in your mind in that situation? Highlight the most important thought or the one which most troubled you. If possible, assess how much do you believe in each of the thoughts (0-100%).	Emotion Which feelings or emotions (sadness, anxiety, anger etc.) did you feel in that situation? If possible, assess the intensity of each emotion (0-100%).	Adaptive answer Use the questions below to compose the answers to the automatic thoughts. If possible, assess how much do you believe in each alternative answer. Which are the possible cognitive distortions (see list of Cognitive Distortions) you have done?	Result Assess how much do you believe now in your automatic thoughts (0-100%) And in the intensity of your emotions (0-100%).
Sat in front of the television doing nothing for the whole evening	I will never get a job as I can't even do anything 80%	Sadness, frustration 80%	There is no evidence for this as I haven't even applied for a job 80% Catastrophizing	Automatic thought re-rated 40% Emotion re-rated 20%

In order to build the alternative answer, do the questions:

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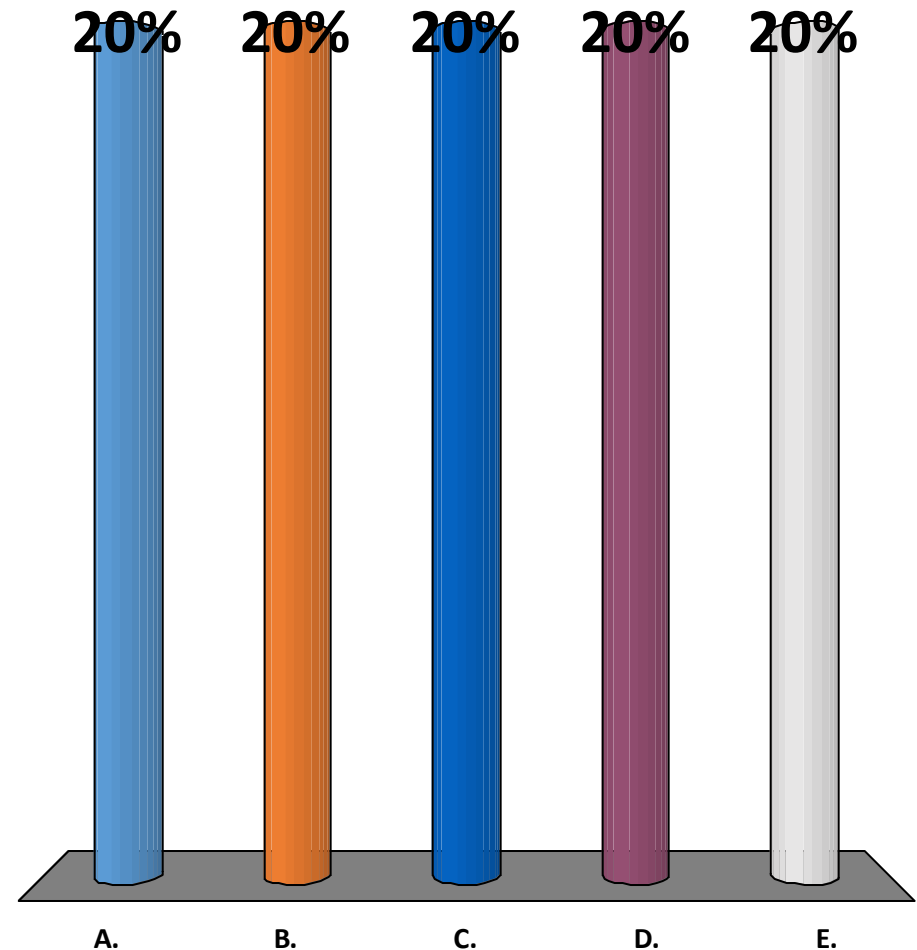
Mindfulness-based cognitive therapy

- [Jon Kabat Zin on Mindfulness](#)
- [Headspace on being the observer](#)

MCQs and EMIs

Which of the following is not part of the five-areas assessment model in CBT?

- A. Behaviour
- B. Memory
- C. Physical symptoms
- D. Thinking
- E. Situation



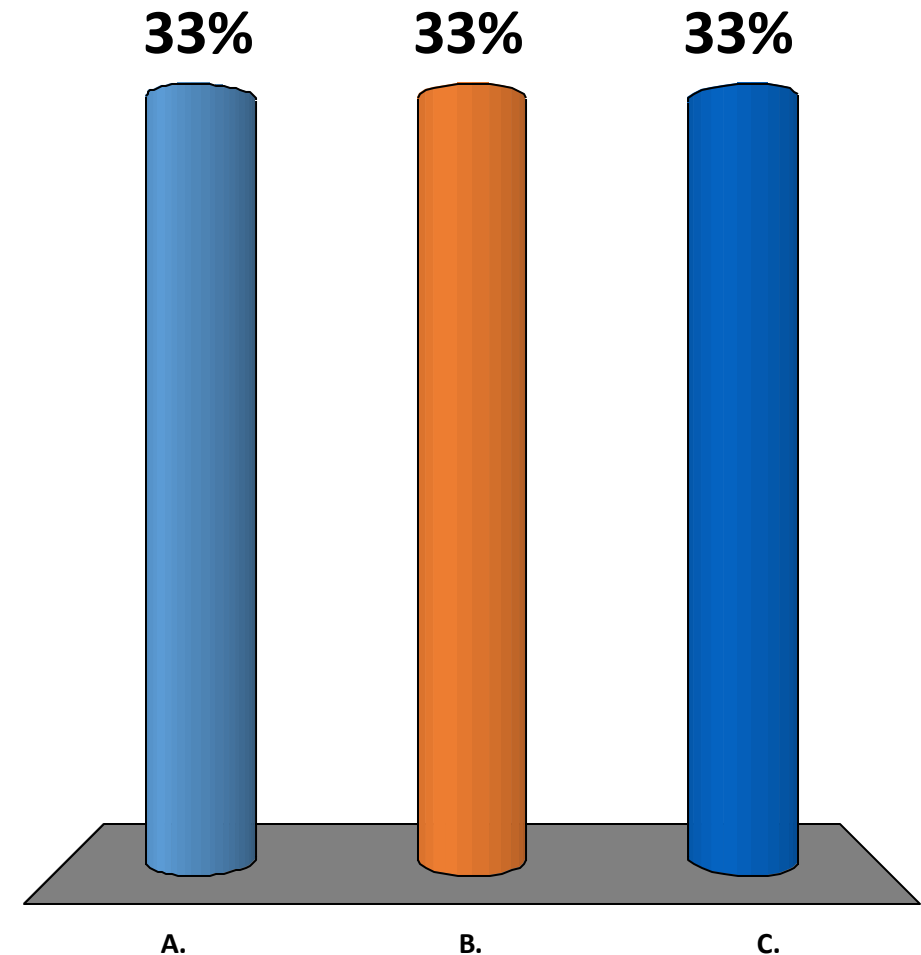
Select the diagnosis, if any, with which each of the following characteristic changes in thinking of patients, from a CBT perspective, is best associated:

i) Negative view of the world

A. Anxiety Disorder

B. Depression

C. Neither



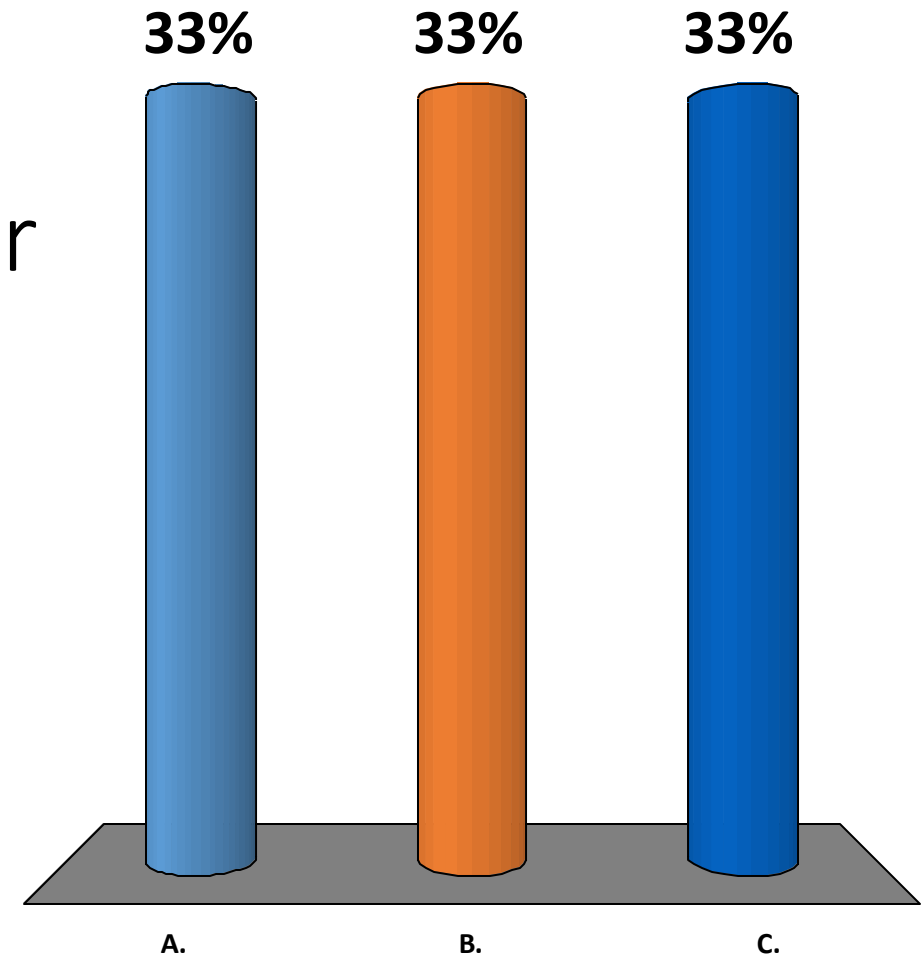
Select the diagnosis, if any, with which each of the following characteristic changes in thinking of patients, from a CBT perspective, is best associated:

i) Decreased perception of their ability to cope with danger

A. Anxiety Disorder

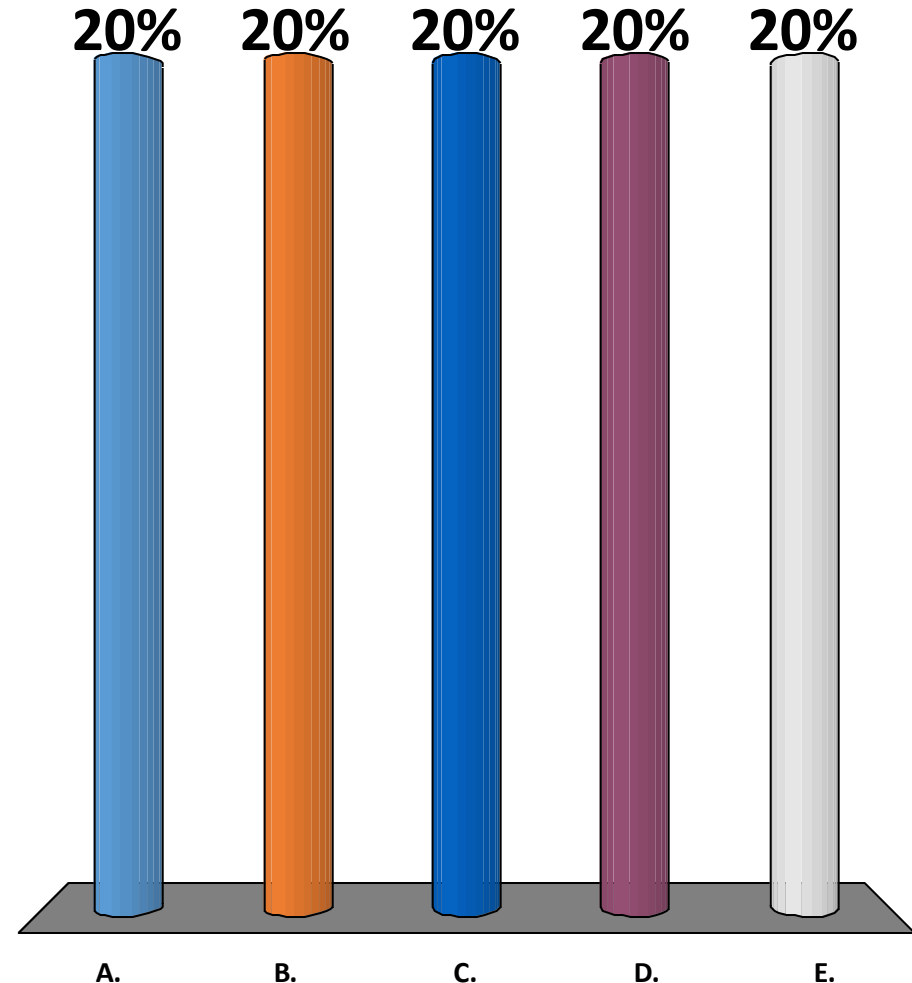
B. Depression

C. Neither



Select one incorrect statement regarding cognitive therapy

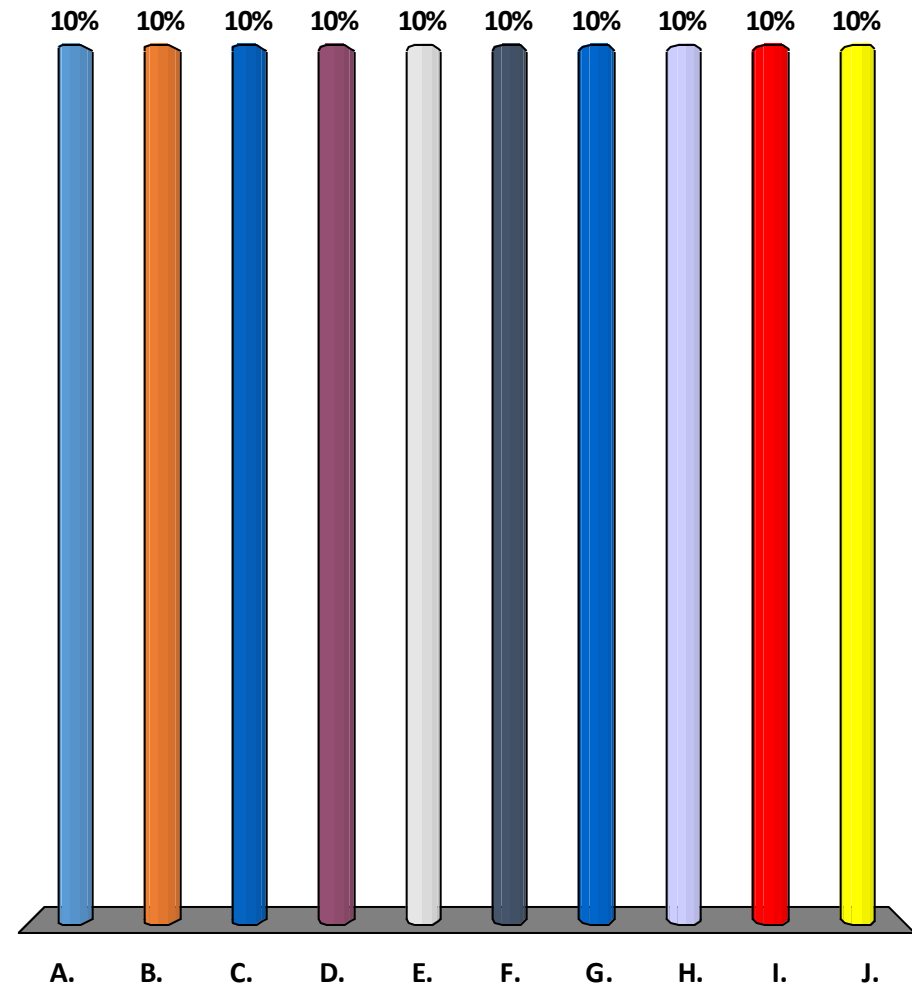
- A. An example of a core belief is “If you don’t please everyone, then they will be upset with you
- B. Beck’s seminal book was *Cognitive Therapy and the Emotional Disorders*
- C. It was developed by Aaron Beck in the 1960s
- D. Psychological patterns may be tackled by noticing thought patterns and correcting misconceptions
- E. The cognitive model states that it is our interpretation of a situation, rather than a situation itself, which may lead to distress



Select the cognitive distortion with which each of the following examples is best associated.

(i) “Anyone can get a first-class honours degree in mathematics”

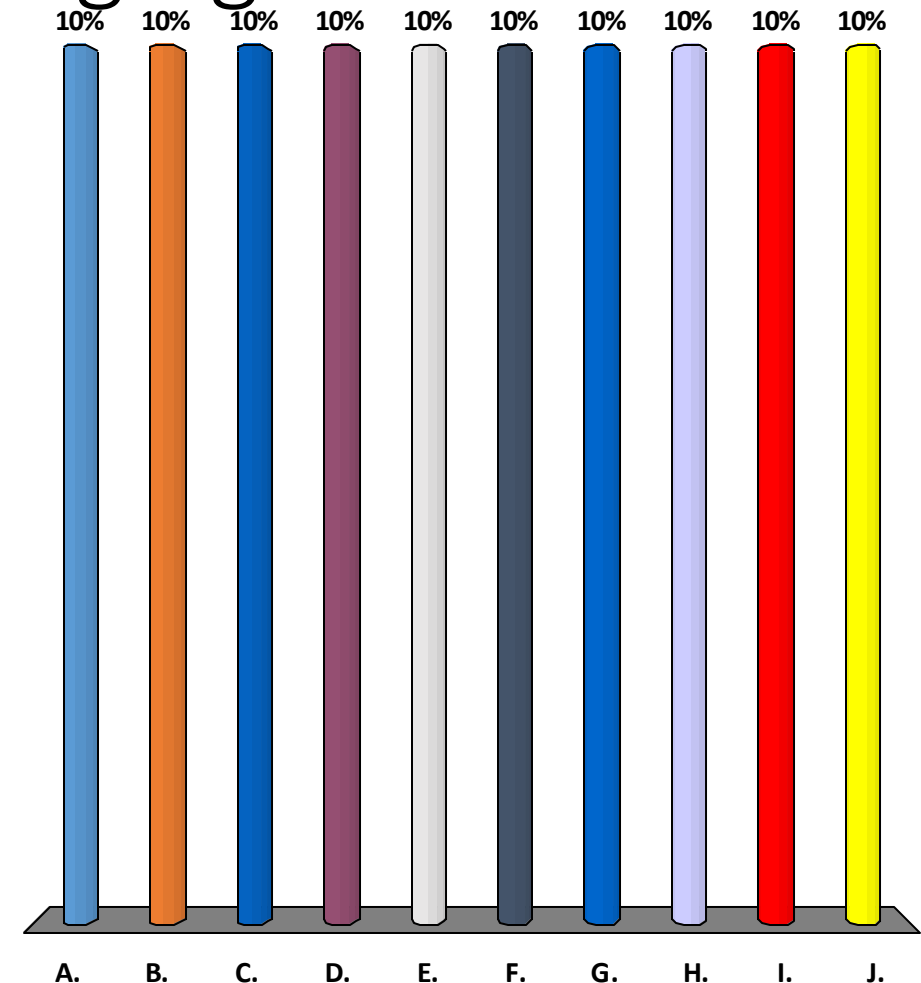
- A. Overgeneralisation
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- D. Personalisation
- E. Catastrophizing
- F. Emotional Reasoning
- G. Mind reading
- H. Fortune telling
- I. Magnification
- J. Minimisation



Select the cognitive distortion with which each of the following examples is best associated.

(ii) “They think I can’t do anything right”

- A. Overgeneralisation
- B. Selective Abstraction (filtering)
- C. Dichotomous Reasoning (all or nothing thinking)
- D. Personalisation
- E. Catastrophizing
- F. Emotional Reasoning
- G. Mind reading
- H. Discounting the positive
- I. Magnification
- J. Minimisation



Unifying the models

- Competition and social defeat results in dopamine sensitivity
- Meditation results in structural brain changes
- Antidepressants influence negative emotional bias and neuroplasticity