# Module: Psychological Foundations of Mental Health

# Week 4 Beyond basic cognition and emotion

# **Topic 2**

**Evaluation: interpretation and appraisal - Part 3 of 3** 

# Dr Wijnand van Tilburg

Department of Psychology, King's College London

#### **Dr Victoria Pile**

Department of Psychology, King's College London

#### Lecture transcript

#### Slide 3

In our lecture today we will explore interpretations and appraisals in more detail. Firstly, we will think about how interpretation biases are studied in the lab in terms of social anxiety. Second, we will look at how they aid our understanding of what contributes to vulnerability and depression in terms of appraisals of life events. Thirdly, we will examine how cognitive models have enabled us to develop person-specific formulations that guide treatment. We will think about this in terms of faulty appraisals of anomalous experiences in psychosis.

#### Slide 4

The way that we interpret a situation impacts on our behaviour as well as the way we feel. For the same situation, our thoughts can lead to very different behaviours. For example, a man leaves his house to go to work. He locks his door and walks onto the street. He steps in some dog poop.

This is awful! Bad things always happen to me. I feel sad. I go home back to bed. I don't leave the house for the rest of the day.

This was on purpose. People are trying to make me look stupid. I feel angry. I shout at the next person with a dog.

Oh, no, germs! If I don't get this off, I will infect and kill my family. I feel anxious. I scrub my shoes in bleach for an hour. I wash my hands for an hour.

Oh, well, these things can happen to anyone. I feel fine. I wipe it off on some grass and I carry on with my day.

Stable individual differences in the way we evaluate situations are essential to our psychological understanding of what drives and maintains mental health disorders.

#### Slide 5

So to begin by looking at the tools we use to assess interpretation biases in the lab-- we might use a questionnaire to assess interpretation biases.

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#### Slide 6

Think about this situation and how you would answer it.

#### Slide 8

How about this one?

#### Slide 9

Miers et al showed that negative interpretations of social situations were more common in young people with high anxiety than controls. High anxious adolescents only showed more negative interpretations for social situations and not for non-social situations. This is important as it demonstrates this interpretation bias is specific to social contexts.

#### Slide 10

Interpretation biases can also be measured experimentally. One measure is the recognition test. In this task, participants are asked to read 10 stories which are ambiguous.

After reading the stories, they are asked to rate how similar false statements are to the stories. These statements have a positive or negative valence with two being interpretations of the story-the targets-- and two being statements related to the story but that are not interpretations-- the foils.

Read through this example.

#### Slide 11

There is good research evidence linking anxiety and negative interpretation biases in both children and adults. This has led researchers and clinicians to ask whether we can use computer training tools to target these biases.

An example of this is cognitive bias modification. This aims to directly target the processes that give rise to dysfunctional thoughts, and so prevent them from occurring. It does this through the presentation of quick and repeated low-level information processing tasks to reinforce a more adaptive processing style.

Studies so far have demonstrated that CBM is effective in altering interpretation style, but the effect on mood states are weaker. CBM offers a promising avenue to make treatments more accessible, but additional research is required to demonstrate whether it can reduce clinical symptoms and improve functioning.

## Slide 12

Thinking now about depression. Two key risk factors for depression are environmental adversity and negative cognitive appraisals about the self, about the world, and about others. However, there has been debate about whether people with depression appraise situations negatively or whether they actually view themselves and the world in a more realistic way compared to their non-depressed peers.

# Slide 13

Krackow and Rudolph designed an experiment to investigate this. They wanted to look at the accuracy of depressed youths' appraisals of life events. They compared young people with a diagnosis of depression, subsyndromal symptoms of depression, and no symptoms of psychopathology on measures of life stress.

First, they demonstrated that those with depression had experienced more independent and self-generated interpersonal stress than non-symptomatic youth.

#### Slide 14

Second-- consistent with a cognitive bias-- those with depression overestimated the stressfulness of events and overestimated their contribution to events relative to non-symptomatic youth.

So they demonstrated that the group with depression both had experienced more environmental adversity, but also appraised these events differently compared to their peers. This highlights the need to consider both realistic interpersonal difficulties and biassed appraisals of experiences.

But what about the future? Could it be that people with depression are more realistic about their future?

#### Slide 16

Research has shown that despite having no evidence, people expect positive events to happen to them in their future. This includes people expecting to both live longer and be healthier than the average person, as well as overestimating their occupational success. This has been called the optimism bias.

People also show an optimistically biassed updating pattern. They incorporate desirable information more into their future predictions than undesirable information. Cohn et al has shown that people with depression do not show the same bias.

#### Slide 17

Moving on to cognitive models in the context of psychosis-- these place interpretations and appraisals are central to understanding the distress experienced by the person. A basic model is applicable to a range of disorders. This is that an intrusion into awareness can be interpreted differently by different people and that these interpretations lead to different emotions, like what we thought about earlier in the dog poo example.

#### Slide 18

So misinterpretation of the same situation leads to different concerns and are associated with different disorders. Morrison gives examples of this. So if the person experiences racing thoughts or palpitations, then a person with delusions may interpret this as alien control or persecution via telekinesis, whereas a person with panic disorder might interpret this as a sign of a heart attack.

Similarly, a benign lump in one's skin might be interpreted as a sign of cancer by someone with health anxiety. Whereas someone with psychosis might interpret this as a transmitter or homing device installed by the secret police.

An unacceptable blasphemous thought might be interpreted by someone with OCD that something bad will happen unless it is atoned for, whilst it might be seen as evidence of demonic possession by someone with psychosis. For psychosis, a key factor seems to be that the interpretation is culturally unacceptable, as well as being distressing.

### Slide 19

There is growing acceptance that intrusions such as voices are a normal psychological phenomenon that may be potentially experienced by anyone. For example, it's been shown that hallucinations are very common in older adults following bereavement. And surveys suggest that 10% to 25% of the general population have had such experiences at least once.

What seems important for causing distress is not the experiences themselves, but rather how they are interpreted by the individual. This is the cognitive model Morrison proposes.

#### Slide 20

So let's think about how this model might guide our understanding. Let's consider a young mother who was physically abused during her childhood by her father. As a child, she was always very

worried about doing the wrong thing, as her father would respond by severely beating her and calling her a devil child. When she tried to ask people for help, she was told not to be so silly and that her daddy loved her very much.

She left home at age 16, found a job and a flat, and was doing well. She is now 22 and has recently had a baby girl of her own. This has meant that she had had to stay at home much more and is becoming increasingly isolated and lonely. So in her experiences, we might add that she was abused by her father and the birth of her own child has meant increased isolation.

In therapy, you might explore some of her beliefs. Let's assume for now that she has beliefs, such as adults can't be trusted with children, I can't ask for help, I am a bad person, people are dangerous. She experiences some intrusions into awareness, such as hearing some voices that tell her to hit her baby, or experiences her mind racing.

She interprets these as the devil telling her to hurt her child and the devil being able to control her thoughts. This makes her feel anxious and guilty and leads to difficulty sleeping.

Her attention towards these thoughts is also likely to increase. She may be trying to do things like avoid children, as well as other people. These factors all interact in a vicious cycle to enhance the beliefs that she has about herself and make her distressing interpretations more likely.

# Slide 21

Creating a model like this helps guide our intervention. The model is usually generated together with the person to help create a shared understanding of their experiences and identify areas to change. It highlights interpretations and beliefs to address with cognitive techniques, as well as behaviours and factors in the environment to modify.

Individual formulation is important to help understand the person's distress and what might be helpful for them. This is a highly collaborative process and it is crucial that the therapist is sensitive to the person's beliefs and current experiences.

#### Slide 22

So today we have explored interpretations in mental health in three ways-- in terms of how they are assessed, how they inform our understanding of what contributes to vulnerability, and, finally, how cognitive models help us to generate a person-specific formulation to guide treatment.