Module:
Psychological Foundations of Mental Health

Week 4
Beyond basic cognition and emotion

Topic 1
Attitudes – Part 2 of 4

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Lecture transcript

Slide 2
Attitudes are functional psychological constructs. That is to say, they help us organise knowledge in an efficient way that saves time and effort in making complex decisions and judgement. The fact that attitudes are functional in this way, however, does not mean that they're infallible.

Slide 3
A good example of attitudes resulting in potentially bad or even dangerous outcomes is prejudice, or a negative effect of prejudgment of a group and its individual members. When people make judgments of others, they often rely on the knowledge they have about the group that these individuals come from, for example, group stereotypes.

Although forming attitudes based on stereotypes is highly efficient-- after all, it does not require from us that we process all the information about the specific individual-- it can lead to prejudiced judgement. Some of these prejudices may be relatively harmless, such as the belief that all Dutch wear wooden shoes. Some of them, however, can be harmful, such as resulting in racism, sexism, and discrimination.

Slide 4
In context of mental health, a particularly problematic phenomenon closely related to prejudice are stigma and stigma by association. Stigmatisation happens when people, for example, sufferers of depression, are treated according to a stereotype that people have of mental health patients, even if these stereotypes tend to be incorrect.

Stigma by association is a tendency for people to devalue someone because of their association with a stigmatised individual. This happens when a person is liked or disliked merely because this person is somehow related to a stigmatised individual. For example, a child may be avoided by peers because a parent suffers from a mental illness. Stigma by association can have negative consequences for the person being judged.

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Particularly interesting cases of attitudes or beliefs in general going wrong are present in mental health challenges, such as psychosis. In particular, sometimes, people's interpretations of events around them, often referred to as appraisals, lead to different outcomes, depending on the beliefs that they hold.

In the following section, Dr. Peters will tell you more about beliefs in mental health and how they relate to, for example, psychosis. After that, we return to the topic of attitudes and take a closer look at how attitudes can be changed.

Slide 5
So I'm going to talk about how attitudes and beliefs relate to mental health. And specifically, I'm going to talk about the case of psychosis and anomalous experiences.

Slide 6
So the traditional view of psychosis is very much a kind of distinct illness, different distinct category, which is on a normal distribution, completely different to normality, which then sits on another normal distribution. So here you can see that the two distributions do not meet, with this normality at one end and psychotic illness as a distinct category. So that's the traditional view of psychosis.

Slide 7
So a different approach is the so-called continuum view of psychosis. And the continuum model is based on evidence that so-called psychotic experiences-- and what I mean by psychotic experiences are experiences like hearing voices, for instance, or sometimes seeing things that other people can't see. And these psychotic experiences are actually common and present to different degrees throughout the general population. So if you like, they are on a continuum with normal experience.

Now, there's different estimates of how common these experiences are. But latest meta-analysis suggests that probably about 7% of the general population have these kinds of psychotic experiences. So in other words, there seems to be a continuum, if you like, between health and normality and psychosis, with only the extreme end being the disorder, past the psychotic threshold. But all sorts of eccentricities and unusual experiences happen in between.

Slide 8
So this is a slide showing the largest meta-analyses that have been done in this field. And if you can see here, in the green box, basically, what that's telling you is that the majority of psychotic experiences in the general population remit, if you like, of their own accord. So only 20% of people who have psychotic experiences go on to experience them. So 80% of them basically just remit spontaneously.

Now, of those 20% who have persistence, sort of ongoing psychotic experiences, then they have a higher risk of developing psychotic disorder than people who don't have psychotic experiences. But even so, in fact, the majority of people who have persistent experiences don't go on to develop a psychotic disorder.

And if you see at the bottom, in the second green box, you'll see that, in fact, psychotic experiences that do not cause distress are twice as prevalent as those who do. So what that's telling you is that, actually, the majority of psychotic experiences are benign and do not lead to a disorder.

Slide 9
So what might be the differences between psychotic experiences, which remain benign and where people continue to be healthy members of the general population, if you like, and those that lead to

pathological outcomes, like a psychotic disorder?

Slide 10
So one way to be looking at this is using the cognitive model, the basic cognitive model, which basically states that it's not the events that happen to us or the internal experiences that we have that lead us to problems and symptoms of mental health problems. But it's actually the way in which we think about them. So it's the appraisals or the interpretations that we have of the events that happen to us and our internal experiences that lead to problematic outcomes.

So for instance, imagine that you hear a noise in the middle of the night that wakes you up. Now, what you might automatically assume and interpret is that, my god, there's a burglar trying to get in. Now, if that's the automatic thought that pops into your head, then the likelihood is that you're going to be scared.

So that's a negative emotion. And probably, you'll either hide under the duvet, or you will perhaps look out for more noises and listen out for anything else that might be happening. And these are behaviours. And of course, they will be behaviours like listening out for noise that make it more likely that you then hear more noises, get more scared. And you get yourself into a vicious cycle.

Now, on the other hand, if the first thing that pops into your head is, oh my god, it's that damn cat again, then you're not going to feel scared, and you're probably not going hide under the duvet. You're probably just going to go back to sleep.

Now, the point is in both of those scenarios, the noise is the same. It's the way in which you've interpreted the noise that leads you to a different path emotionally and behaviorally. So this is what the basic cognitive model is about for all mental health, almost all mental health experiences. That basically, the kind of clinical symptoms that people have are not simply statements of experience. There's an appraisal and interpretation stage in between.

Slide 11
So in the case of psychotic experiecnces, is it the case that the diffference between people who have benign psychotic experiences and those who end up with pathalogical outcomes is it the case that it is just the experiences that are different between those two groups or indeed is it the case that appraisals are different between those two groups.

Slide 12
So this slide shows you the results from a fairly large study that compared people who had psychotic experiences who remained healthy members of the general population. So they didn't have a need for care, if you like, had never be diagnosed with a mental health problem relating to their experiences. And they'd never been in need of presenting to mental health services.

So that's the non-clinical group, for which there were 92. While the other group were the clinical group, who were people with psychotic experiences, but had been diagnosed with various psychotic disorders and were in receipt of mental health services at the time of testing them. And we wanted to see whether the types of experiences that they had were the same or different.

Now, what you can see in middle of the Venn diagram were all the experiences that were common to both groups. So both groups had voices and, in fact, hallucinations in all modalities. So they had visions and also olfactory hallucinations, in other words, smelling things.

And they also had what's called first rank symptoms of psychosis, so things like thought insertion or having a feeling or believing that you have thoughts put into your mind, and also believe that people can read your mind or control your mind, and also symptoms of dissociation.

So all of these symptoms were found in both groups. And so there was a large overlap of psychotic

experiences between them. And in fact, if you look in the left hand side of the blue circle, our non-clinical population had more of particular types of hallucinations than the clinical group.

So somatic and tactile hallucinations-- so that's kind of feeling things that aren't there-- were more common in that group, and also feelings of elation and having precognitive experiences and being able to tell the future, and having this kind of insight and revelatory experiences.

And interestingly, that group, the non-clinical group, also had an early onset of their experiences. So by sort of mid-adolescence, that was the average of the onset of their experiences. And it was a bit later in the clinical group.

Now, there were also some types of experiences that were more common in the clinical group, which is the pink circle. So for instance, the type of voices, where voices are commenting on your actions or basically talking about you, were actually quite rare in the non-clinical group. So they tended to be found much more in the clinical group. And also, although the non-clinical group had thoughts inserted into their head, they had fewer experiences of having their thoughts kind of withdrawn from their heads or broadcast to other people.

But really, the most striking and important differences between the two groups were that the clinical group tended to have delusions, while the non-clinical didn't, and especially persecutory delusions, which were the most common types of delusions. So our non-clinical group, people who are in the general population with their psychotic experiences, do not tend to also have paranoid delusions.

And the other difference was self-reported cognitive difficulties, so like losing a cognitive grip, so not being able to concentrate, to focus, and just not being able to keep your head straight. And these experiences were only found in the clinical group.

And lastly, not surprisingly, what we did find was the clinical group have more severe experiences. So there's something about the relentlessness of having these experiences that are more likely to lead you to a disorder, quite understandably.

Slide 13
So the take home message, really, is that it's not so much what you experience, but it's how much you experience It, with severity being very important. But having said that, two types of experiences are important. And that's this kind of cognitive grip, although, of course, that's a cognitive symptom, not necessarily a psychotic symptom, and also persecutory beliefs, so a kind of paranoid worldview.

Slide 14
So going back to the cognitive model, is there a difference in terms of what sense these two groups make of their experiences? So is there a difference in terms of appraisals between these two groups?

Slide 15
So in the same study, we compared the appraisals of these clinical and non-clinical groups. Now, the first thing to say is that it's not just the case that the non-clinical group don't find their experiences distressing. They actually find them clearly helpful. So you can see from this graph here, the yellow graph is the non-clinical group. And we just asked them to rate on the scale of whether their expenses were destructive, unhelpful, right through to mildly helpful and clearly helpful.

And you can see that the non-clinical group most often saying their experience is clearly helpful. So it's not just an absence of distress. There's something about these anomalous experiences that enrich these people's lives.

Slide 16
And we also found that the clinical group, so here the bars in black, found their experiences more negative-- so here, the valence graph-- more dangerous, more abnormal, interestingly, and also less controllable.

But if you see the last column, which is externality-- in other words, are my experience to do with an external, something which is external, as opposed to the product of my own mind-- there were no differences between the two groups. So it's not just that people in the general population have, if you like, insight that their experiences are the product of their own mind. That's not the difference between these two groups, the difference in terms of thinking they're dangerous, negative, abnormal, and uncontrollable.

Slide 17
And there were also lots of other differences in terms of appraisals of their experiences between the two groups. So here, for this graph, we just asked them to explain where their experiences came from and what they thought they were about and basically what sense they made of them. And then, we rated their answers on the basis of a number of different categories.

So the categories that we rated were biological, psychological, related to drugs, spiritual or supernatural, normalising-- that's an explanation which is it's just part of normal human experience-- and other people. And you can see, there were lots of differences between the two groups. Now, not surprisingly, the non-clinical group were more likely to view their experiences as spiritual experiences or supernatural experiences and also normalising, so part of normal human experience.

While the clinical group, on the other hand, made more biological explanations, which probably fits with the fact that that's what they're told. So it's something to do with their brain. That's what they're told in mental health services. Slightly more drug related explanations as well.

But really, the striking difference-- and we have found this in a number of other studies, so it's a very robust finding. That clinical group are more likely to blame other people, think other people are involved in some way in causing their experiences, while the non-clinical group do not believe that at all.

Slide 18
So these findings shed some light in the differences in appraisals between clinical and non-clinical group. But really, just asking people in interviews to talk about their experiences and their explanation is quite a messy way of looking at it, especially when it's retrospective, because, of course, the way in which people interpret their experiences then have an impact on the way in which the experiences are felt in the first place.

So we need to find a way of somehow disentangling people's experiences from their appraisals experimentally, if we want to be able to look at this in a more robust fashion. And what has been done to look at this is basically, if you like, creating a symptom analogue in an experimental task. So that's, if you like, mimicking a very mild anomalous experience, like giving people the experience that their thoughts are being read by a computer or an iPhone or having a kind of hearing voice-type analogue experience.

And everybody, every group, gets given the same anomalous experience. So everybody gets the same thing, and it's controlled for everybody. And then, you can see whether people's appraisals differ based on the same anomalous experience, which is unrelated to any ongoing experiences they might have.

Slide 19

So one of the tasks that was used is a little task called the card task, which you may have come across before. If you haven't come across it before, just have a quick go at it. So what participants are asked to do, and what you can do if you would like to, is to select one of the cards and concentrate on it.

Don't click on a card or say anything. Just memorise the card.

Slide 20
Now, the card that you have chosen will now be selected and removed from the pile.

Slide 21
Has it gone?

Slide 22
Now, what participants are asked at this stage is, how do you think this was done? So in case you didn't quite work out how that worked, the reason the card that you chose then was no longer there was because, in fact, all of the cards are different at the second stage. And the trick relies on the fact that people will scan for their own card and not notice that the cards are all different.

Slide 23
So what we've done is have this little task, and we've taken it around in a number of different studies to clinical and non-clinical group. And we've got a number of different tasks that use iPhones and an analogue of hearing voices. And when exposed to experimentally induced anomalous experiences, what we found consistently is that the clinical group tend to make more maladaptive appraisals of anomalous experiences than the non-clinical group.

And what I mean by maladaptive appraisals-- so the ones that we've asked people to rate, basically, have been what we would call intentionalising. So that's believing that the trick was done with intent. It was done on purpose to make you look foolish. Or personalising, in other words, there's a person involved in this. It's not just the computer that did the trick. There's somebody behind the scenes, basically, that made that happen.

Internalising, believing that means that's something wrong with me. Or conspiracy, basically, believing it's part of a wider conspiracy. And consistently, the clinical group are more likely to rate those appraisals for these experimentally induced anomalous experiences, while the non-clinical group do not.

In addition, the clinical group find them more striking. So those little tasks, find them more striking, more distressing, and more threatening. And they're also more likely to think it's specific to them. So in other words, it doesn't just work the same with everybody. And it's also related to their ongoing experiences.

So as you can see, these are quite striking differences, even with just a very small, experimentally induced anomalous experience. Again, the take home message from here is that it's not necessarily external appraisals that seem to be important in determining whether or not your experiences are pathological or benign.

There's something about seeing these experiences as threatening and having a kind of paranoid worldview, believing other people are involved, that there's an intent there, that it's part of a wider conspiracy. These are the appraisals that mean that psychotic experiences either stay benign or lead you to a disorder.

Slide 24
Now, these findings actually have important implications for therapy and the way in which we might help people who come to us with distressing psychotic symptoms, because the implication is that,

actually, it's not necessarily about getting rid of the symptoms, getting rid of the experiences, because these can be meaningful for people.

But it's helping people think about them in a different way, so in a less threatening way, and coping with them differently to reduce the distress that people have about them. So it's not necessarily the experience that's the problem. It's the way people view the experience and what they do about it.

Slide 25
And changing the way people think about their experiences can actually have a profound impact on people, as this fMRI study showed, where we gave people cognitive behaviour therapy for psychosis for a period of six to nine months. And at the end of the therapy, people's brains responded differently to threatening facial expressions. So in other words, therapy can fundamentally alter how information is processed at a neural level.

Slide 26
So again, the take home message is the mind can change the brain. And attitudes and beliefs are basically paramount in determining mental health problems. And changing them can change your brain.