Cognitive Behavioral Model Of Intolerance Of Uncertainty (Hebert, Dugas, 2019)

Description

Individuals with generalized anxiety disorder (GAD) report significant worry, which they find difficult to control and experience as distressing. Other common symptoms include restlessness, physical arousal, difficulty concentrating, muscle tension, and poor sleep. Early psychological models of GAD conceptualized the anxiety in relatively generic cognitive terms of an individual's heightened preoccupation with danger and underestimation of their ability to cope, or describing worry as a failed attempt at problem-solving (e.g. Butler et al, 1987; Borkovec et al, 1993; Roemer, Orsillo, Barlow, 2002). Treatments derived from these models had limits to their effectiveness, with GAD being described as "*largely impervious to traditional cognitive restructuring approaches*" (Hebert & Dugas, 2019). Confusingly, many people struggling with GAD reported high levels of threat even in the absence of objective risk, difficulties, or danger (Milne, Lomax & Freeston, 2019).

Dugas, Gagnon, Ladouceur & Freeston's cognitive-behavioral model of GAD, published in 1998, gave a central role to intolerance of uncertainty (IU). Intolerance of uncertainty is defined as a "*negative dispositional characteristic arising from a set of catastrophic beliefs about uncertainty and its consequences*" (Hebert & Dugas, 2019) or more simply, "*an underlying fear of the unknown*" (Carleton, 2016). IU helps to explain the mismatch in people with GAD between perception of threat and objective levels of risk or danger: people who are high in IU can perceive danger in situations when people low in IU wouldn't – for them triggers are more noticeable.

Empirical studies have confirmed that higher intolerance of uncertainty is a risk factor for the development of GAD and is a key factor in the maintenance of anxiety and worry (Dugas & Robichaud, 2007). In the 1998 model intolerance of uncertainty was conceptualized as a kind of 'catalyst' which could exacerbate initial "What if … ?" questions, or even lead to their generation from ambiguous situations. Appraisals about worry (e.g. "*Worrying helps avoid disappointment", "Worrying can stop bad things from happening*") were also given prominence. Interventions derived from this model included helping clients to address unhelpful beliefs about worry, problem-solving training, and imaginal exposure to feared worry scenarios.

In 2019, Hebert & Dugas published an updated cognitive behavioral model of intolerance of uncertainty, proposing that a "*new model of IU was needed to clarify the intimate relationship between the state of uncertainty, one's beliefs or interpretation of uncertainty, and anxiety symptoms*". Rather than focusing on an individual's appraisals of worry, this updated conceptualization gives a central place to their appraisals of uncertainty. As such, it can be thought of as an appraisal model for IU, with similarities to cognitive behavioral models of OCD (Salkovskis, Forrester, Richards, 1998) and panic (Clark, 1986) where beliefs about intrusions and body sensations are central to the respective maintenance cycles.

Description

Components of the cognitive behavioral model of intolerance of uncertainty include:

- **Triggers & the state of uncertainty.** Uncertainty is defined as a state of not knowing or being unsure. Hebert & Dugas propose that specific triggers for uncertainty are ambiguity, novelty, and unpredictability.

- **Catastrophic beliefs about uncertainty.** Central to the model is the way in which an individual appraises uncertainty. Given a particular trigger, someone high in IU might hold the belief *"If I'm unsure I shouldn't attempt it"* whereas someone low in IU might hold the belief *"If I'm unsure it means I'm learning something".* A distinction is made between the (normal) preference for certainty, and the catastrophically negative beliefs about uncertainty typically present in people who suffer from GAD.

- **Emotional, cognitive, and behavioral sequelae**. The consequences of negative beliefs about uncertainty are described in the model as: feelings of anxiety, worry about potential consequences, and safety strategies intended to reduce negative consequences.

- **Interactions between components.** Intolerance of uncertainty is described as a process which 'runs in the background' and interacts with all components of the model. For instance, people who are high in IU are more likely to detect novelty, ambiguity, and unpredictability in situations. Once detected, a state of uncertainty is more likely to be activated, and to lead to catastrophic beliefs about uncertainty. The model suggests that commonly-used safety behaviors by people with GAD such as avoidance, or attempts to gather information (and thus reduce uncertainty) reduce an individual's exposure-to, and tolerance-of, uncertainty, thus maintaining the cycle. The process of worry is believed to actually increase uncertainty – the process of asking "What if … ?" questions can increase the number of available possibilities (uncertainties).

Earlier cognitive behavioral interventions for GAD (e.g. Dugas & Ladouceur, 2000; Dugas & Robichaud, 2007) included a broad selection of treatment components including: re-evaluation of the usefulness of worry, problem-solving training, imaginal exposure, and behavioral exposure to uncertainty. In contrast, in their description of the cognitive behavioral model of intolerance of uncertainty, Hebert & Dugas suggest a narrower-and-deeper treatment approach focusing exclusively on behavioral experiments targeting beliefs about uncertainty: "*In the case of IU, individuals use planned behaviors to create a state of uncertainty in order to explore uncertainty-related beliefs*" (Hebert & Dugas, 2019). They describe how clients are encouraged to design behavioral experiments to test their particular uncertainty beliefs, and include examples such as responding to the belief *"I can't stand not knowing – I need reassurance*" with an experiment of comparing 3 days of responding as usual to 3 days of refraining from reassurance-seeking. They suggest that preliminary evidence indicates behavioral experiments targeting IU may be more effective than repeated situational exposure to uncertainty (Hebert & Dugas, 2019).

Instructions

> ### Suggested Question
>
> *Many people's anxiety fits the pattern on this diagram. I wonder if we could explore some of your thoughts, feelings, and reactions and see what kind of pattern they follow?*

1. Introduce the concepts of uncertainty (situations where you don't know the outcome) and intolerance of uncertainty (more than just a dislike of uncertainty: *"almost as if you have a 'psychological allergy' in which a small amount of uncertainty produces a powerful reaction"*). *"Do these descriptions sound like they relate to you at all?", "Can you identify with having strong reactions to uncertainty?".*

2. Explore the client's typical triggers for – and reactions to – uncertainty. Common triggers for uncertainty are novel, ambiguous, or unpredictable situations. *"Can you give me some examples of uncertain situations that bother you?* (The therapist can note qualities of novelty, ambiguity, or unpredictability), *"How do you typically feel in situations that are unpredictable? Can you give me some examples?", "How do you feel in new situations? Can you give me some examples?", "How do you feel in situations you can't control? Can you give me some examples?".*

3. Help the client to explore their beliefs about uncertainty using examples from their life. Research indicates that beliefs often fall into two general categories: (a) beliefs that uncertainty has negative implications for oneself and one's behavior, and (b) beliefs that uncertainty is unfair and spoils everything. Many uncertainty-related befliefs might be described as attitudes or assumptions. *"What are some of your beliefs about uncertainty?", "What do you fear will happen when you encounter uncertain situations?"* (e.g. *"I won't be able to enjoy myself, I won't be able to function"), "What would you say is your attitude towards uncertainty?", "If a situation is uncertain, what does that mean to you?", "What are the consequences of an uncertain situation for you?".* Clients can also use the Intolerance of Uncertainty Scale (Freeston & Rheaume et al, 1994) as a cue for self-reflection, or as in-session prompts. *"What do you think about these ideas? When I am uncertain I can't function very well", "Uncertainty makes me vulnerable, unhappy, or sad. I can't stand being taken by surprise".*

4. Explore coping strategies and their unintended consequences. Explore the client's reactions when they appraise uncertainty in a negative fashion. *"What do you tend to worry about in uncertain situations?", "What kind of thought-process do you experience in uncertain situations?", "What is your mind trying to do?", "How do you feel emotionally in uncertain situations?", "What do you do to cope, or to keep yourself safe in a situation that is uncertain?".*

5. Explore the consequences of the client's reactions and consider when any of these reactions might act to reinforce the cycle. Central to this model is the notion that safety strategies reinforce pre-existing beliefs about the unacceptability of uncertainty. *"What are the immediate (short-term) consequences?"* (Often a reduction in anxiety, or an increase in feelings of control or safety), *"What might be the long-term consequences of using these safety strategies?"*, *"What has happened to your anxiety over time?"*.

6. Explore the interactions between components and discuss targets for treatment. *"Where do you think we might need to work to break this cycle?", "Do you think everyone feels the same way about uncertainty? Do you know anyone who has a different attitude to uncertainty? What does that mean?", "What might we need to do to explore your beliefs about uncertainty?"*. This model emphasizes the idea that treatments targeting symptoms of GAD such as worry or bodily tension are likely to be less productive, and that the primary treatment target should be a client's beliefs about uncertainty.

7. Introduce behavioral experiments as a way to test catastrophic beliefs about uncertainty. *"So it sounds like you believe you can't function when there is uncertainty. We can think of this as a kind of prediction – 'I won't function if there is any uncertainty'. How much do you believe this prediction? The great thing about predictions is that we can test them to find out how true they are. Perhaps we could test out this prediction by planning an experiment?"*

References

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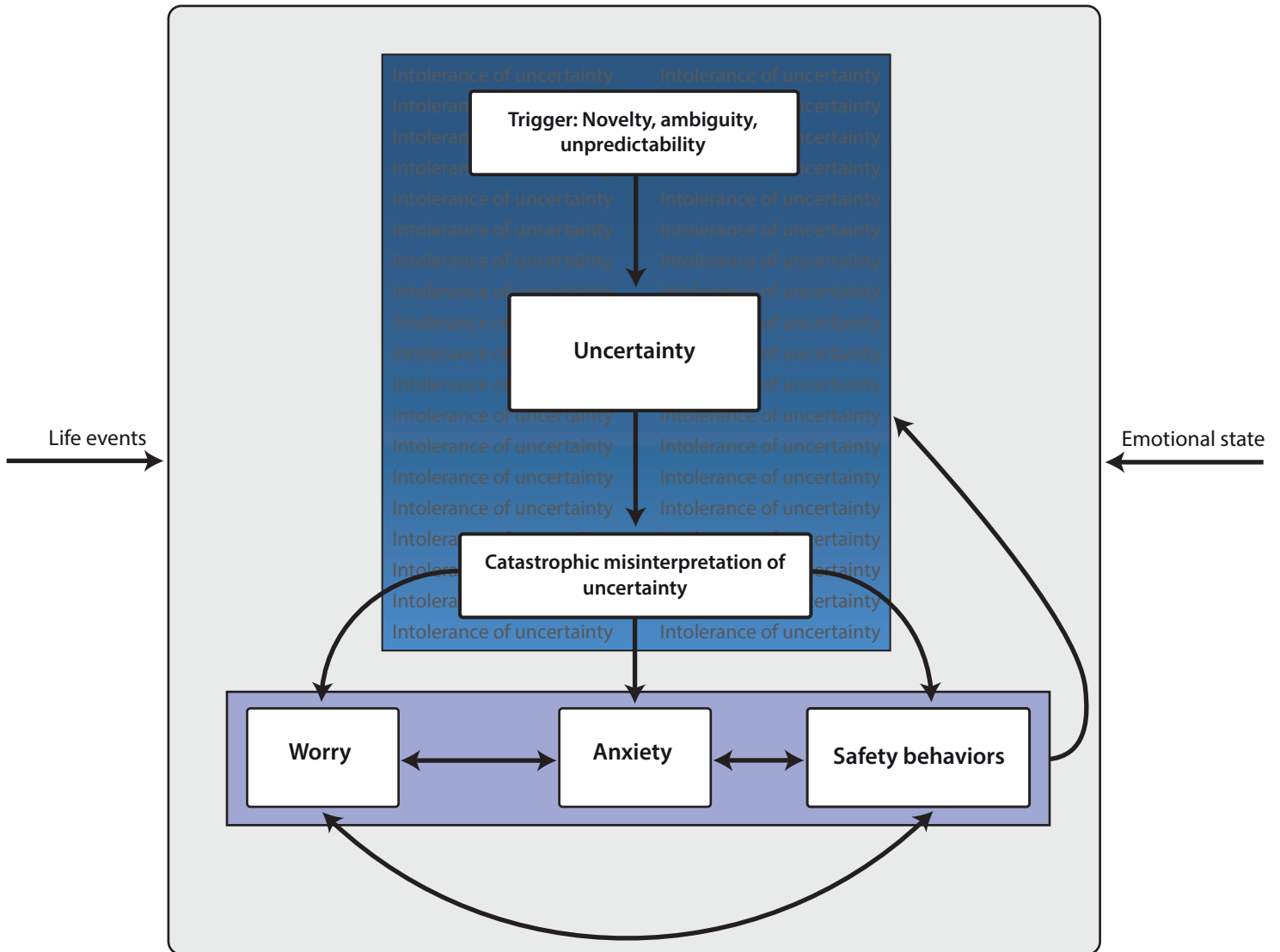
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