CBT for Psychosis

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I have no conflicts of interest

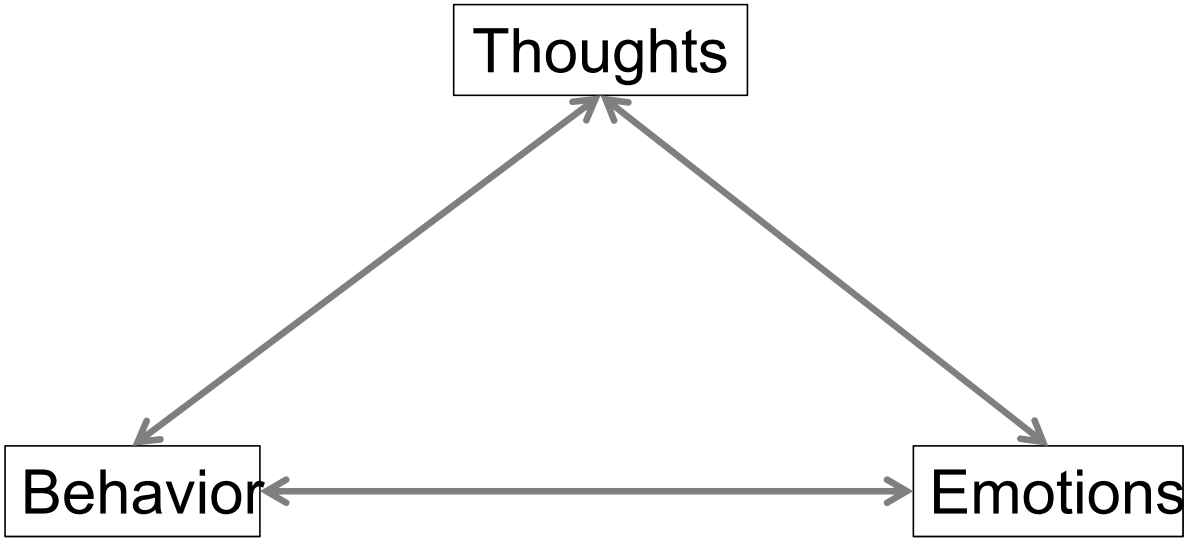
What I hope you learn today…

1. Refresher of CBT basics
2. Applying the CBT model in Psychosis
3. How to use CBT to address positive symptoms
4. How to use CBT to address negative symptoms
5. Using CBT in the context of Coordinated Specialty Care

Quick Review of CBT

Basic Principles and Structure

The Cognitive Model



How we <u>think</u> about a situation affects how we <u>feel</u> and how we <u>behave</u>

Situation	Thoughts	Feelings	Behaviors
Social Distancing and self-isolating at home during coronavirus outbreak	I miss my family in the UK	Sad ☹	Reach out to family via FaceTime
	I don't know what will happen next	Worried 😐	Repeatedly check the news/social media
	I get to read more books at home	Neutral	Read the latest YA sci-fi books

CBT Core Characteristics

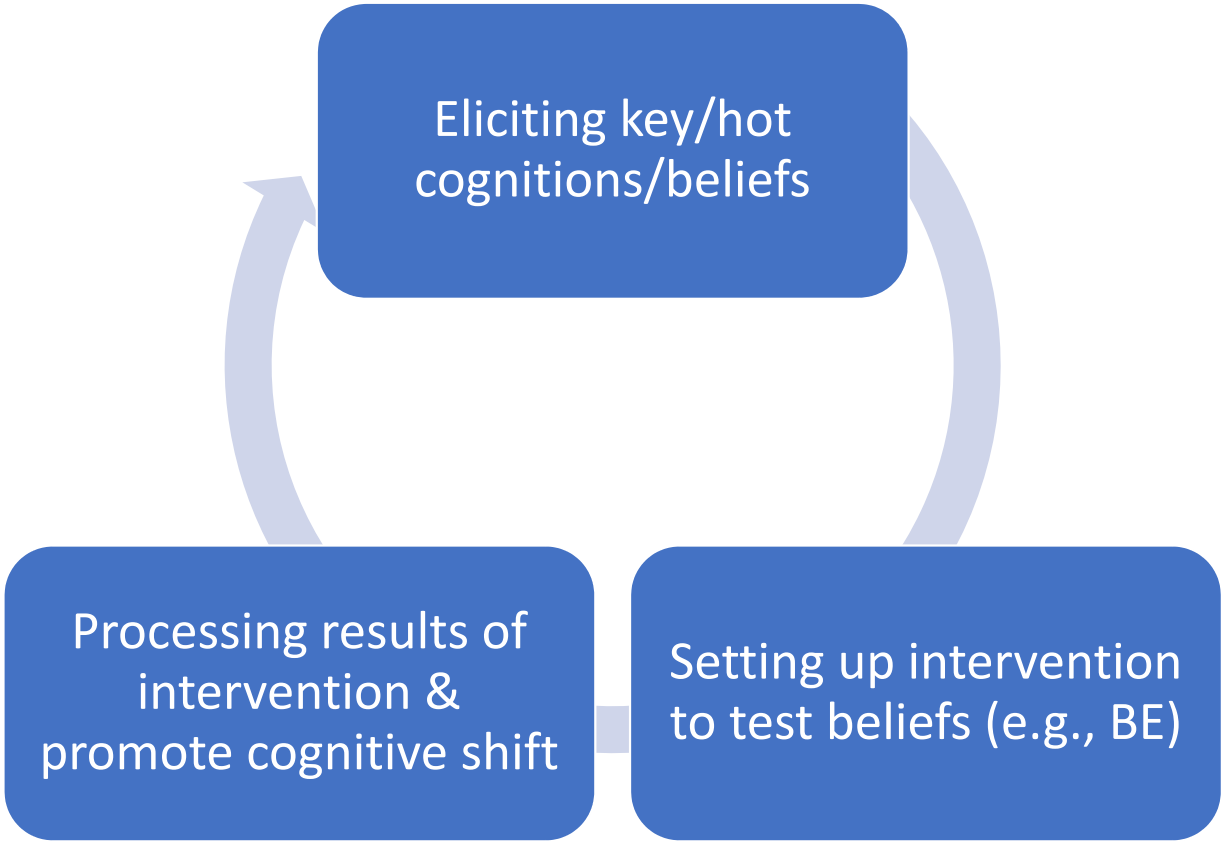
- Collaborative project between client and therapist
- Structured & active engagement
- Empirical in approach
- Problem-oriented
- Guided Discovery/Socratic Questioning
- Behavioral Methods
- Summaries and Feedback

Westbrook et al. 2011

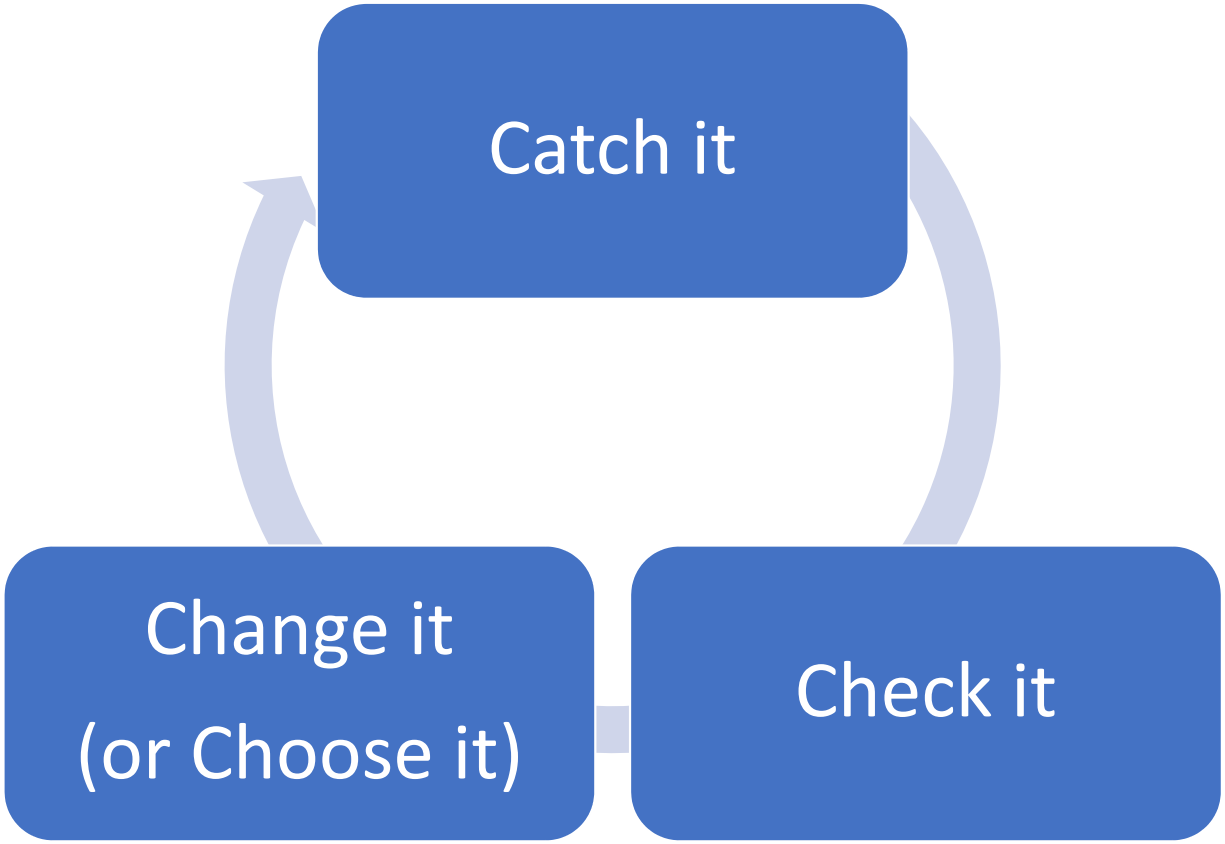
Structure of CBT Session(s)

- Agenda Setting (~2 min)
- Homework review (5-10 min)
- Clinician Item & homework setting (15 min)
- Client Item (15 min)
- Feedback (~2 min)

What are you doing in the room/in CBT?



AKA “The Three Cs”



Granholm et al. 2016

The 3 C's

CATCH IT, CHECK IT, CHANGE IT

Work to identify, evaluate, and reframe distorted interpretations & attributions related to identified problems.

Use both cognitive and behavioral techniques

Based on CBT case formulation generated *together*

Granholm et al. 2016

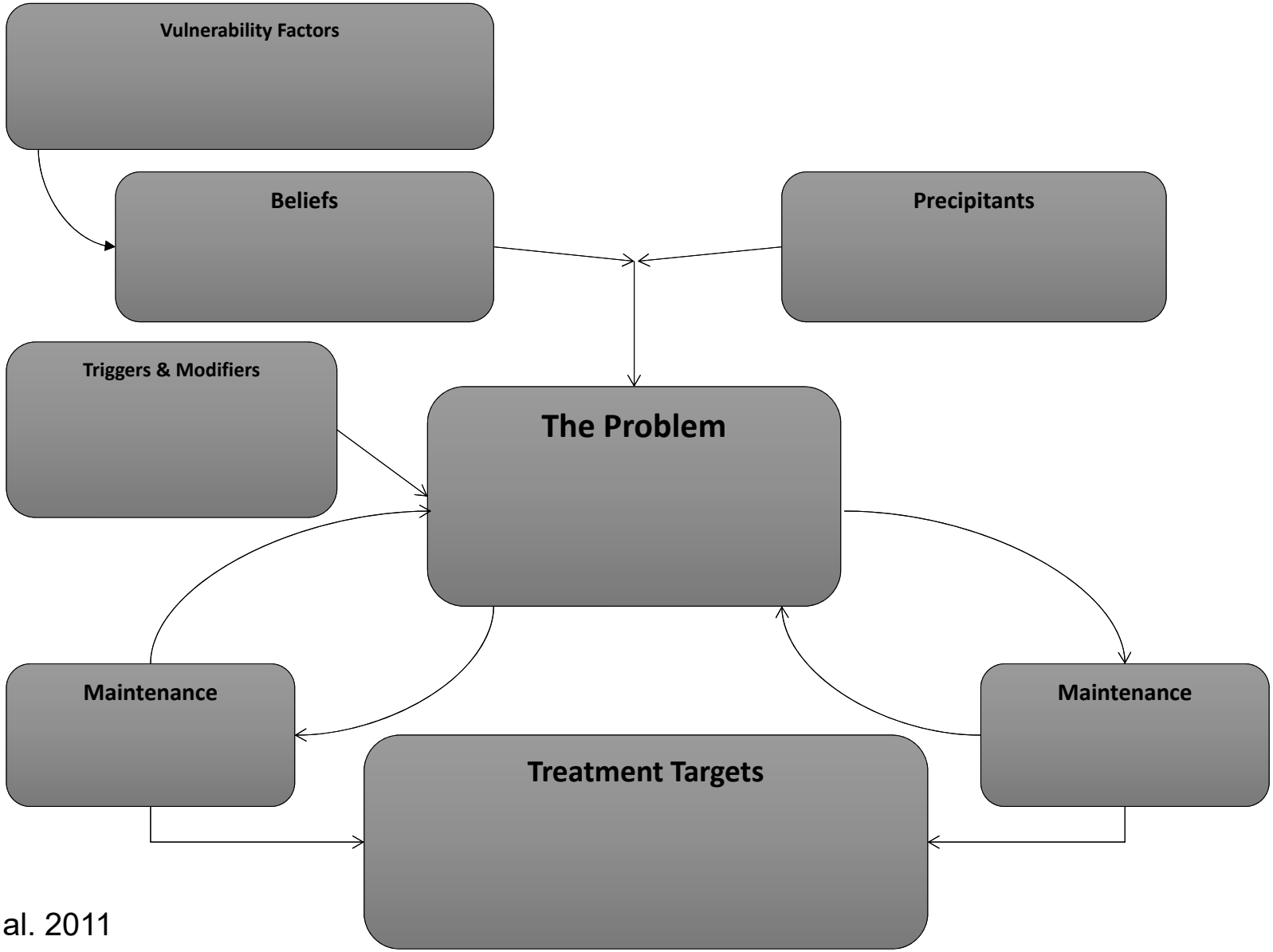
What is a CBT Case Formulation?

- Uses the CBT model to develop:
  - Description of the ***current*** problem(s)
  - Account of ***why*** and ***how*** these problems developed
  - Analysis of processes that ***maintain*** the problems
- Identification of maintenance processes informs intervention choices
- Focus on maintenance processes because:
  - Causal processes are not always the same as maintenance processes
  - Easier to obtain clear info on maintenance than original events
  - Easier to change current processes than change the past!

Westbrook et al. 2011

If you want to put out a fire, you need to tackle the elements keeping the fire going (e.g., heat, fuel, oxygen) rather than look for the spark that started the fire

Westbrook et al. 2011



Westbrook et al. 2011

Common Maintenance Processes

- Safety Behaviors & Avoidance
- Reduction of Activity
- Catastrophic Misinterpretations
- Self-fulfilling prophecies
- Perfectionism
- Short-Term Rewards

Westbrook et al. 2011

CBT for Psychosis

Applying the cognitive model to psychotic symptoms

What is the defining characteristic of psychosis?

Psychosis is traditionally described as difficulty distinguishing what is real from what is not real

e.g., Delusions are fixed false beliefs in the face of contrary evidence

BUT … Many psychological difficulties are defined by distorted beliefs

Depression

“I am worthless”

“I am a failure”

Held with strong conviction during an episode

Panic Attacks

“I’m going to die”

“I cannot survive this”

Held with strong conviction in the moment

Anorexia

Convinced body is larger than it is

Held with very high conviction

OCD

"If I don't do this ritual, something bad will happen to my family”

Held with high conviction

Applying the cognitive model to Psychosis

- Psychosis is characterized by **culturally unacceptable** interpretations of experiences
  →Stigmatizing & distressing => maintains psychosis?
- Implications:
  →Normalizing may reduce stigma & distress
  →CBT techniques that are successful at addressing distorted beliefs in depression, anorexia, panic disorder, and OCD may be successful in psychosis too!

Morrison et al. 2004; Morrison 2017

What is 'Normal' anyway?

- All people have the potential to hallucinate or have delusional thinking under the right circumstances
- In the general population…
  - 30-40% have weekly paranoid thoughts
  - 10-20% have brief paranoid beliefs that they firmly believed and caused significant distress (e.g., I can detect coded messages about myself)
  - 8% of the general population hear voices on a regular basis
  - 60-80% the general population have heard a voice
- So what is the difference between this and psychosis?
  - Causes distress; stigmatized; it's getting in the way
  - ***Culturally unacceptable*** interpretations of experiences
  - Interacts with cognitive symptoms…

Van Os, 2009; Freeman, 2006

Slide Credit: Dr. Daniel Shapiro

S-REF Model – AKA “the filter model”

- **S**elf-**R**egulatory **E**xecutive **F**unctioning Model
  - Conceptualize psychotic symptoms as “intrusions”
  - Cognitive impairments, especially executive functioning, contribute to salience of intrusive experiences
  - Metacognitive Beliefs about intrusions e.g. “Thinking about this could make me go mad/means I’m a bad person” causes distress
  - Interpretation of intrusions is what distinguishes individuals with psychosis from other diagnoses

Morrison et al. 2004; Morrison 2017

Symptoms as a Failure of Source Monitoring

- Voices are misattributed internal mental events (e.g. verbal thoughts, inner speech)
- Difficulty identifying where stimulus/thought came from
  - ⇒Assume it came from outside the self (thought)
  - ⇒Triggers NATs about state of mind (thoughts)
  - ⇒Triggers anxiety/fear (feelings)
  - ⇒Efforts to reduce anxiety (behavior)
- Maintained by anxiety reduction/avoidance behaviors
  - Use CBT model & intervention techniques to get at the thoughts and break the maintenance cycle

Bentall et al. 1991; Johns & McGuire, 1999; Morrison et al. 2004

Symptoms as a Conflict with Metacognitive Beliefs

- Often intrusive/distressing/violent thoughts that don't match beliefs about the self
  - ⇒ Triggers negative thoughts about what the voices are saying (thoughts)
  - ⇒ Triggers negative emotional states/distress (feelings)
  - ⇒ Generate alternate explanation for intrusions (thoughts/behavior)
  - ⇒ Avoidance of triggers/suppression of thoughts (behavior)
- Maintained by reduction in conflict/cognitive dissonance

Morrison et al. 2004

Symptoms as Unusual Interpretations of Experiences

- Delusions may be rational attempts to explain anomalous perceptual experiences or culturally unacceptable explanations of life events
- How we interpret anomalous experiences influences our response
- Example: Experience intrusive/unusual thought that people are talking about them
  - Interpretation #1: “It’s my imagination; I’m just tired/stressed”

  $\Rightarrow$Get some sleep, reduce stress.
  - Interpretation #2: “They are trying to hurt me”

  $\Rightarrow$Hypervigilance for other instances, adopt safety behaviors

Morrison et al. 2004; Morrison 2017

The 3 key ingredients of CBTp

1. Psychoeducation to normalize psychotic experiences, reduce the stigma and, consequently, reduce distress.
2. Collaborative development of a case formulation to inform understanding of psychotic symptoms & make sense of the experiences
3. Acceptance of psychotic experiences & working to reduce associated distress/conviction is better than attempting to change symptom occurrence

Phases of CBT for Psychosis

Hardy “CBTp Fact Sheet”; Morrison 2017

General Tips:

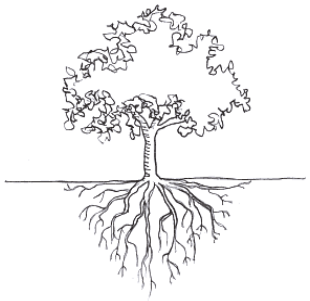
- Psychoeducation & normalization of experience is key
- Always place in the context of case formulation
- Use Guided Discovery: Simply telling client that they are wrong will not change the belief
- Process causing distress may not be the psychotic symptom itself
- Always work within a recovery-oriented framework

Hardy “CBTp Fact Sheet”; Morrison 2017; Brabban et al. 2016

Positive Symptoms

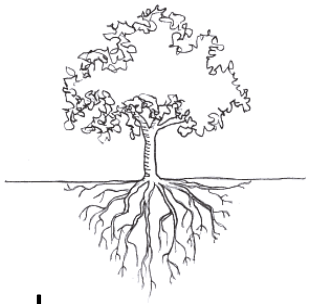
Applying CBT techniques to positive symptoms

How to conceptualize positive symptoms (1)



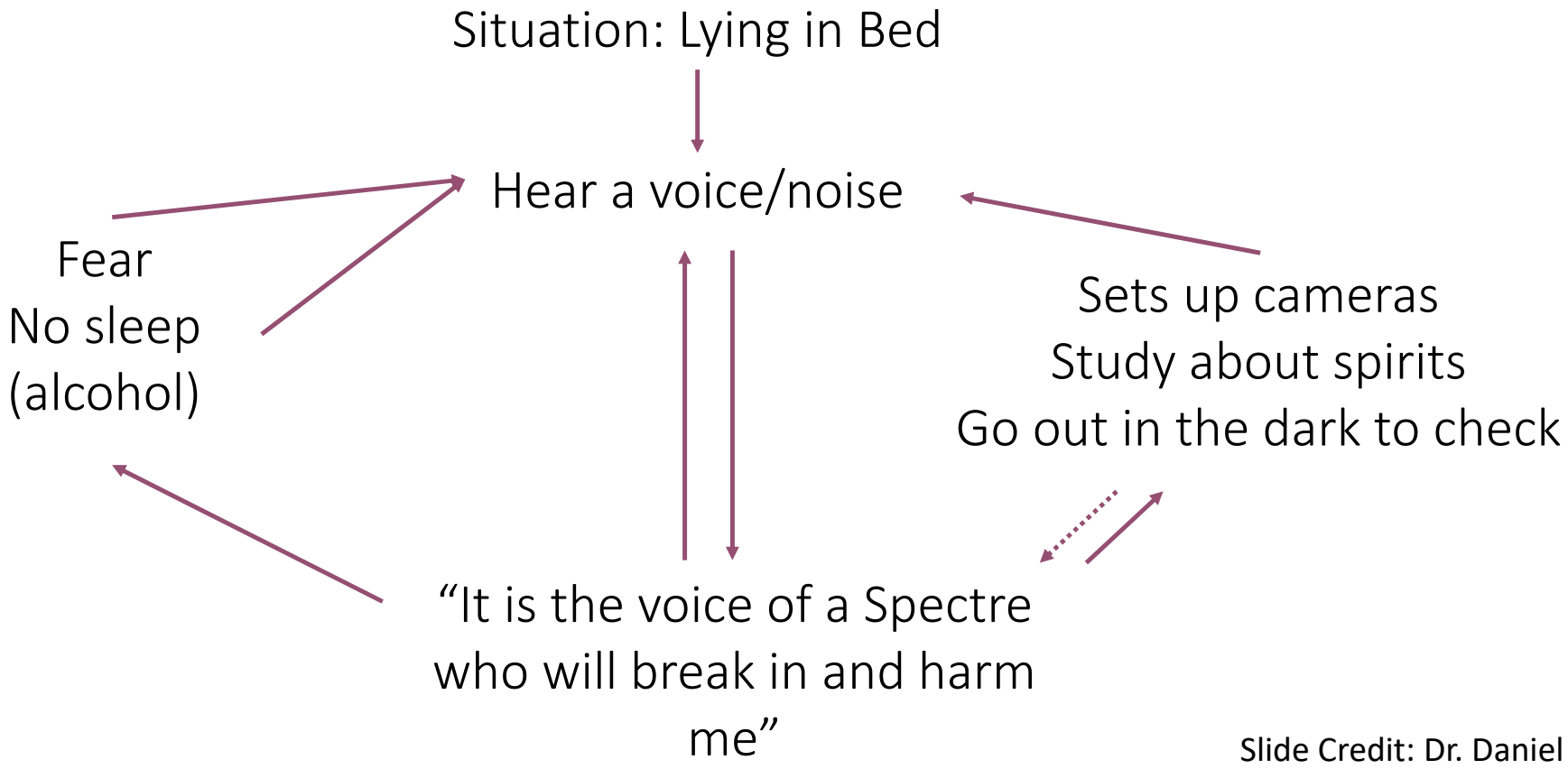
- Conceptualize symptom as *situation* (causing distress)
  - Situation = hearing voices
  - Thoughts = interpretation of voices and/or their content
  - Feelings = emotional reaction to NATs about voices
  - Behaviors = safety behaviors/response to voices
- Conceptualize *content* of symptom as thoughts:
  - Situation = hanging out with friends
  - Thoughts = voices saying “everyone hates you”
  - Feelings = emotional reaction to content of voices (e.g., sad, anxious)
  - Behaviors = safety behavior (social withdrawal/avoidance)

How to conceptualize positive symptoms (2)



- Unwanted perceptual experiences treated just as you might treat unwanted mental experiences (e.g., thoughts) that *you* have
- Delusions often have a kernel of truth & play a function
  - Find the kernel & the function then work to alter or replace; reduce saliency of more 'trunk-level' beliefs (inside out)
  - Understand maintenance factors and precipitants (how beliefs are formed - outside in)
  - Metacognitive techniques – thinking about thinking.
- Behavioral activation and scheduling for negative symptoms
- Conceptualize cognitive symptoms as vulnerabilities, maintenance factors, sometimes precipitants

Example: Male individual in his late teens reports hearing voices and seeing movement out of the corner of his eyes. He believes they are somebody attempting to break into his room while he is sleeping.



Slide Credit: Dr. Daniel Shapiro

Common negative beliefs associated with symptoms of psychosis

Symptom	Cognition/Belief
Amotivation:	"I'll fail, why try"
Asociality:	"Others won't like me"
Anhedonia:	"I won't enjoy, I can't…"
Alogia:	"I won't make sense, my brain is broken"
Hallucinations:	"I/My thoughts are out of my control, dangerous, powerful, correct"
Delusions:	"I/ my thoughts are out of control"
Suspiciousness:	"I will be rejected, others will criticize me, I'm not as good as others"

Grant et al. 2011; Baker & Morrison, 1998; Freeman & Garety, 1999; Morrison et al. 2002

Slide Credit: Dr. Daniel Shapiro

Practical Tip #1: Reduce Distress

- Provide psychoeducation (see part 1 of this seminar series!) to normalize experiences and reduce stigma
- Work to identify what the source of distress is – it might not be the psychotic symptom itself
- Use recovery-oriented framework and validation / acceptance skills

Morrison, 2017; Brabban et al. 2016

Practical Tip #2: Reduce Conviction

Goal may not be to remove distorted belief entirely; reduction of conviction can be very helpful

Examine alternate explanations for the intrusion/experience and see how each explanation effects conviction level

Pie chart technique is a useful tool for acknowledging multiple explanations for an experience

Pie Technique (referential thinking example)

Event People ask me how my parents and my dog are. They are always very polite.

Anxious or paranoid thought: They are telling me that something is going to happen to them.

Belief at time – 50%

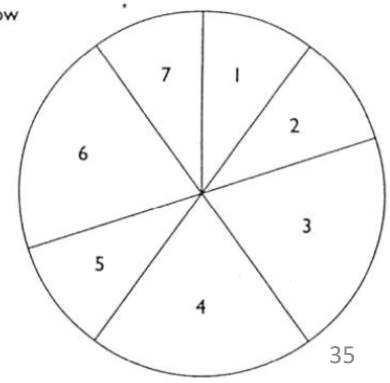
Anxiety at time – 50%

Are there any other factors which might explain the actual event?

Write these down, leaving your initial explanation as the last one.

1	They might just be being friendly	10%
2	Everyone in the neighbourhood knows our dog	10%
3	My mum and dad are popular in our area	20%
4	People know that I always walk the dog	20%
5	People often ask how elderly people are	10%
6	People who know I've been very ill probably don't know what to say to me	20%
7	They are telling me that something is going to happen to them	10%

For each explanation (starting from number 1), rate how much (out of 100%) of what happened could be explained by that factor.



Screenshot image from Morrison et al. 2004

Examine evidence for & against different interpretations (voices example)

Interpretation	Evidence For	Evidence Against
A higher power (e.g. God talking to me)	The voice can predict unlikely things happening Imagery of higher power Physical feeling - it feels very powerful	Prediction could be coincidence A lot of what they predict doesn't occur
A sign of illness	It can be associated with elevated mood It can be triggered by paranoia	It doesn't seem to happen at work It is different to elevated mood
An unusual thought process	It could be a stress response It can be triggered by cannabis What they talk about is similar to things I think about	It feels real

Practical Tip #3: Pros & Cons of Holding Belief

- Some cognitions are less amenable to “CHECK IT” phase
  - Hard to evaluate accuracy of some beliefs
  - Evaluation could cause more distress
- Examine pros & cons of holding the belief, regardless of accuracy
- Can do this for both past and present - some beliefs may have been useful at some point!
- Always review Pros first
- Can also do “helpful/not helpful” vs. “true/not true” exercise

Pros & Cons of Belief: Danai Gurira (whom I have never met) is in love with me

Pros of holding / acting on this belief

- Makes me feel special
- Consistent with my belief that I have a soulmate
- Makes my life feel like an adventure

→More adaptive belief: "*It is irrelevant that Danai loves me, because my partner loves me and I love them and we can build a rich life together*"

Cons of holding/acting on this belief

- Frustration when Danai and I do not meet
- Causes difficulties with my partner
- Makes me angry with my partner for not being Danai
- Upsets my family
- My therapist says this is a problem
- It costs a lot of money to keep visiting LA in an effort to meet Danai

Use helpful/unhelpful & accurate/inaccurate matrix

Situation: Hearing Voices

HELPFUL/ACCURATE This is an unusual thought process that happens when I am stressed	**HELPFUL/INACCURATE** This is the voices of a higher power talking directly to me and no one else
UNHELPFUL/ACCURATE This is a sign of psychotic illness	**UNHELPFUL/INACCURATE** This is a sign that I am going crazy and will never succeed in life

Practical Tip #3: Promote internally generated explanations

Encourage internal attributions and explanations for experiences

Provide psychoeducation about psychosis & the filter model

Conduct behavioral experiments to promote internally generated explanations

Negative Symptoms

Applying CBT techniques to negative symptoms

How to address negative symptoms?

- Negative symptoms not necessarily unchangeable
- Build case conceptualization to determine factors that might be contributing/maintaining observed symptoms
- Behavioral interventions are typically more successful than cognitive
- Behavioral Activation/Activity Scheduling is a key intervention!

Aleman et al. 2017; Ellis et al. 2013; Morrison et al. 2004

Environmental Influences on Negative Symptoms

- Social Isolation -> Absence of stimulation
  →Generate solutions to increasing social supports/interactions

- Trauma & PTSD -> emotional numbing & avoidance
  →Trauma informed CBT/TF-CBT to address trauma symptoms

- Social Anxiety -> social withdrawal
  →Identify and address anxiety symptoms
  →Behavioral activation

Aleman et al. 2017; Ellis et al. 2013; Morrison et al. 2004

Depression & Negative Symptoms

- Possible relationship between negative self beliefs (“I will fail”) and negative symptoms

  →Treat with activity scheduling, mastery & pleasure ratings.
  →Use The Three C’s to address cognitive distortions and ore beliefs

Aleman et al. 2017; Ellis et al. 2013; Morrison et al. 2004

Self-Efficacy & Negative Symptoms

- Belief that actions will not lead to successful outcomes:

  "There's no point; my choices/behaviors won't make a difference"

→Use behavioral experiments to challenge negative self-efficacy beliefs

→Use The Three C's to identify, evaluate, and reframe cognitive distortions

Aleman et al. 2017; Ellis et al. 2013; Morrison et al. 2004

Anxiety & Negative Symptoms

- Anxiety could lead to avoidance and numbing, which can look like negative symptoms

→Use case conceptualization to identify triggers/modifiers & maintenance factors

→Choose appropriate cognitive & behavioral interventions for maintenance factors

Aleman et al. 2017; Ellis et al. 2013; Morrison et al. 2004

Negative Symptoms as Safety Behaviors

- Associated with unusual/delusional thinking -> flat affect prevents mind reading
- Avoidance of traumatic treatment interventions -> flat affect prevents feared outcome

→Examine pros & cons of behavior

→Behavioral Experiments to test predictions

Aleman et al. 2017; Ellis et al. 2013; Morrison et al. 2004

CBTp as part of CSC

CBT in the context of the Coordinated Specialty Care Model

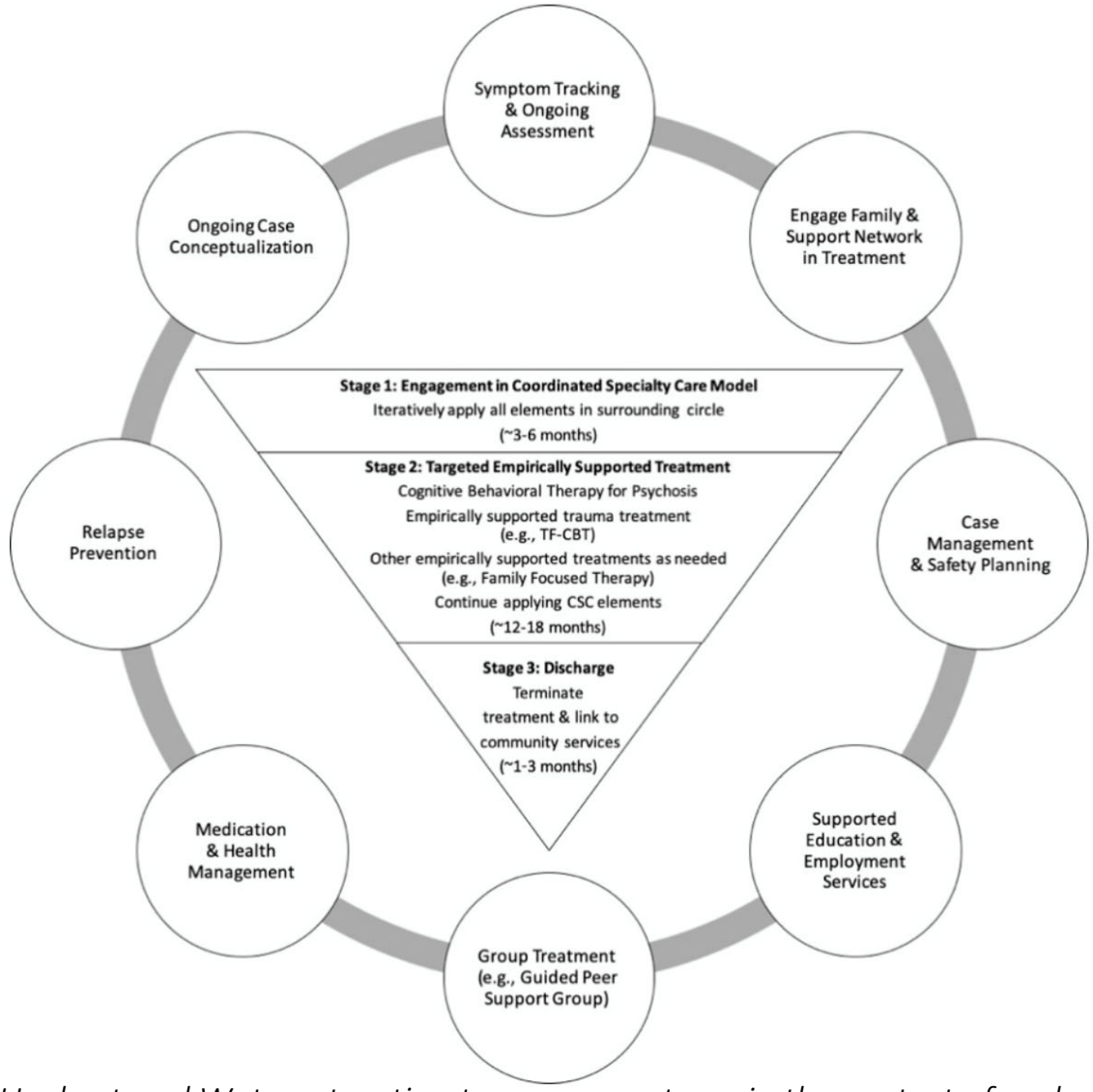
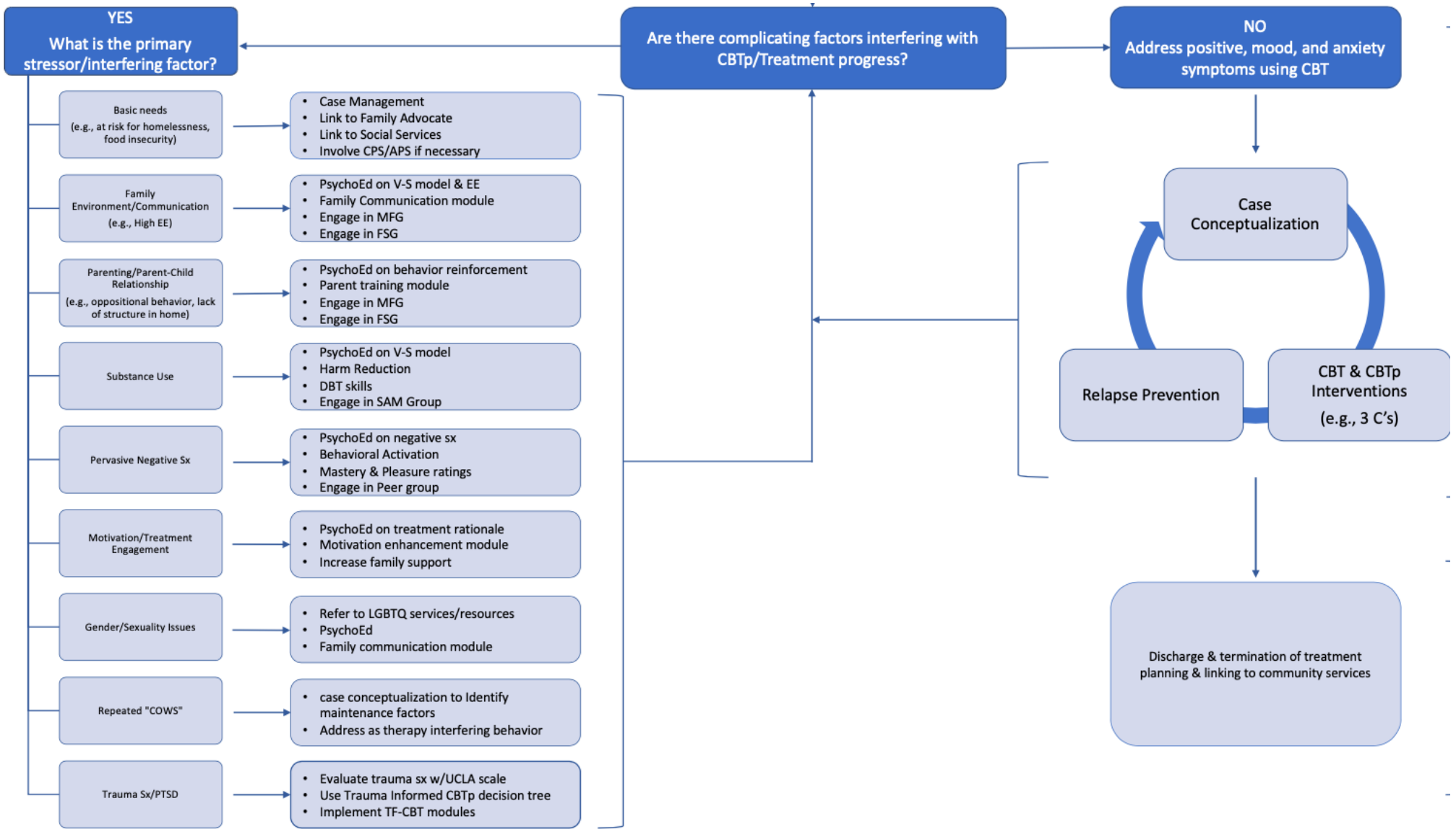


Figure from Folk et al. 2019: *Unchartered Waters: treating trauma symptoms in the context of early psychosis*


Are there complicating factors interfering with CBTp/Treatment progress?
YES
What is the primary stressor/interfering factor?
Basic needs (e.g., at risk for homelessness, food insecurity)
Case Management
Link to Family Advocate
Link to Social Services
Involve CPS/APS if necessary
Family Environment/Communication (e.g., High EE)
PsychoEd on V-S model & EE
Family Communication module
Engage in MFG
Engage in FSG
Parenting/Parent-Child Relationship (e.g., oppositional behavior, lack of structure in home)
PsychoEd on behavior reinforcement
Parent training module
Engage in MFG
Engage in FSG
Substance Use
PsychoEd on V-S model
Harm Reduction
DBT skills
Engage in SAM Group
Pervasive Negative Sx
PsychoEd on negative sx
Behavioral Activation
Mastery & Pleasure ratings
Engage in Peer group
Motivation/Treatment Engagement
PsychoEd on treatment rationale
Motivation enhancement module
Increase family support
Gender/Sexuality Issues
Refer to LGBTQ services/resources
PsychoEd
Family communication module
Repeated "COWS"
case conceptualization to Identify maintenance factors
Address as therapy interfering behavior
Trauma Sx/PTSD
Evaluate trauma sx w/UCLA scale
Use Trauma Informed CBTp decision tree
Implement TF-CBT modules
NO
Address positive, mood, and anxiety symptoms using CBT
Case Conceptualization
CBT & CBTp Interventions (e.g., 3 C's)
Relapse Prevention
Discharge & termination of treatment planning & linking to community services

Thank you!

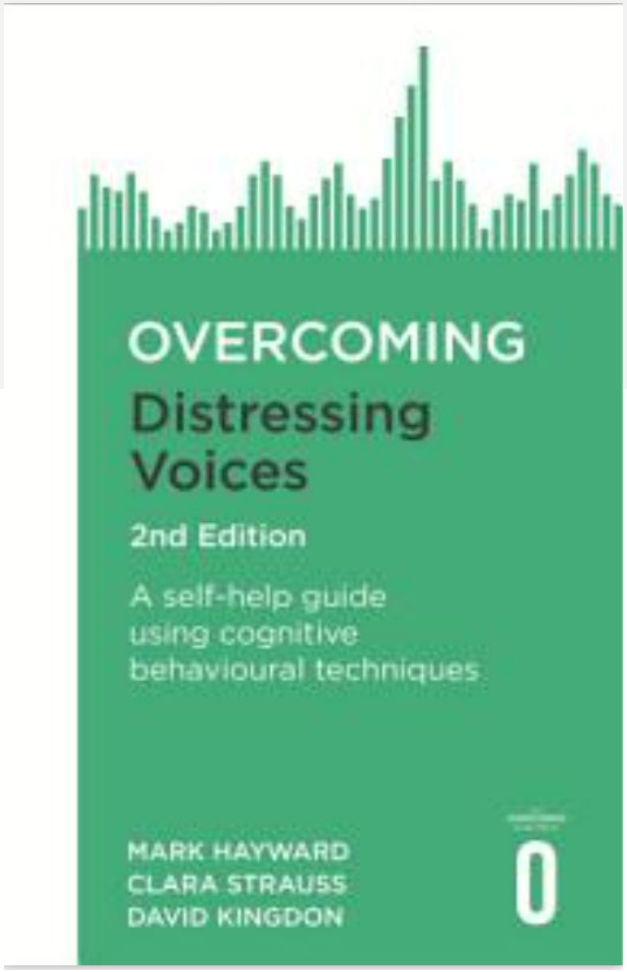
QUESTIONS?

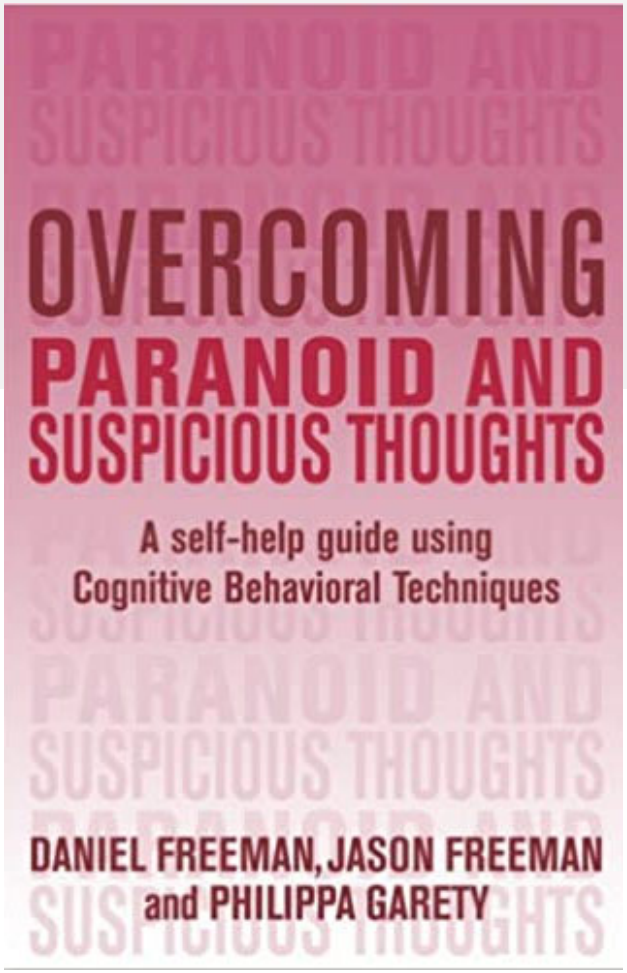
Useful Resources

- UC Davis Free Educational Video Series: https://www.youtube.com/playlist?list=PLber-ifp8mw4srs-Pr_qzXlandf3nPHwE
- North American CBTp Network: https://www.nacbtp.org
- UK CBTp Training Resource: https://www.psychosisresearch.com/cbt/
- PEPPNET: https://med.stanford.edu/peppnet.html

Books that clients might find helpful

- Overcoming Distressing Voices: https://books.google.com/books/about/Overcoming_Distressing_Voices_2nd_Editio.html?id=yq9fDwAAQBAJ
- Overcoming Paranoid & Suspicious thoughts: https://books.google.com/books/about/Overcoming_Paranoid_and_Suspicious_Thoug.html?id=9JowjwEACAAJ





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