Cognitive Defusion for Insomnia

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Background Info

- 10 y/o
- Male
- Caucasian
- Borderline intellectual functioning
- Exposed in utero to opioids
- Born premature with mild physical disability that was successfully treated in infancy
- Removed from mother's custody
- Has lived with maternal grandmother, grandfather, and older sister since age 3
- Rare contact with father
- Sporadic, unpredictable contact with mother
- Sister is older, "golden child", and more cynical about their mother. Ct frequently argues with sister

DX
- Generalized Anxiety Disorder
- Post-Traumatic Stress Disorder (unspecified)
- Intermittent Explosive Disorder

RX
- Trileptal for mood stabilization
- Clonidine and Melatonin for sleep
- Wellbutrin and Guanfacine for ADHD symptoms
- Has an IEP and is enrolled in a behavioral classroom

History

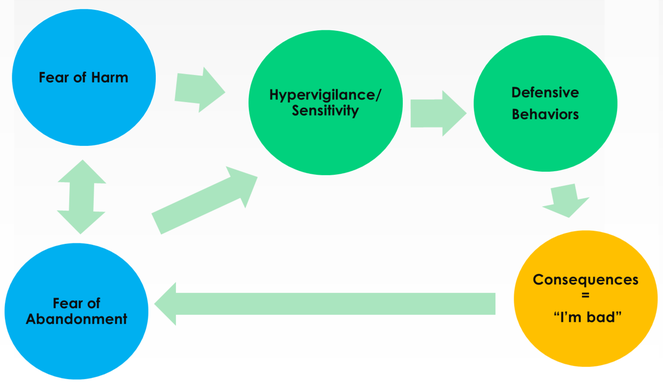
- Ct has been receiving treatment longer than is typical at agency
- Mother has pattern of disappearing and returning unpredictably. Sometimes she is particularly affectionate when she is present in effort to "make up for lost time"
- Client has increased anxiety and more disruptive behavior when mother visits/leaves or when he sees suspicious people
- Client is sensitive to rejection and often preemptively abandons his friends for perceived slights

Presenting problem

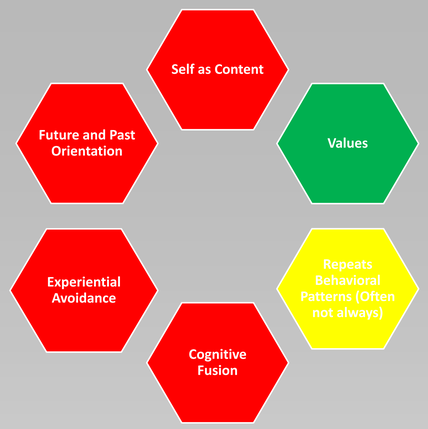
Referred to agency after crisis care where he was taken for hiding a weapon and making aggressive and suicidal statements

Therapy goals: setting limits, coping skills, dealing with trauma, and anger issues resulting in aggression and suicidal ideation statements

Behavioral Pattern



ACT Conceptualization



Ct has low overall psychological flexibility

- **Cognitive Fusion**: Fused with fears of abandonment and harm, as well as belief that he is the only one who can or will defend him
- **Self as Content**: reacts to these thoughts immediately as if they were real physical events
- **Experiential avoidance**
  - Friends/being outside
  - Being alone (especially at night)
  - Going to school
  - Discussing emotionally challenging topics
- **Future and Past Orientation**
  - Holds grudges persistently
  - Worries about things happening in the future
- **Repeats Behavioral Patterns**
- **Values**
  - Biggest value is love for grandmother; frequently cites this as reason for good behavior
  - Other possible value is fairness (with regards to others as well as self)

Intervention Target - Sleep

- Trouble falling and staying asleep
- Can only sleep in bed with grandmother and disturbs her sleep consistently
- Sleep issues had not been responsive to other treatment
- Client was already receiving separate EMDR treatment for trauma

Intervention Rationale - Cognitive Defusion

- Sleep issues seemed to be centered around anxiety/distress, fusion with fears, and experiential avoidance
- Cognitive Restructuring/Challenging thoughts of intruders at night had not worked *(you have dogs, security cameras, family members, safe neighborhood, who would hurt you?).* Ct would always come up with a rationalization for sustaining his behaviors.

Intervention Support - Cognitive Defusion

- Cognitive Fusion is the state/trait of believing thoughts to be literally true and/or commands that must be obeyed, or "prescriptive realities" (Blackledge & Hayes, 2001).
- The concept of cognitive fusion derives from Relational Frame Theory, which describes how humans relate abstract concepts to each other, especially through the use of language (Luciano, et al., 2014)
- Relational framing enables anticipatory and efficient behavior at the cost of flexible responses to sensory stimuli (Blackledge, 2007)
- Cognitive Defusion seeks to disrupt relational framing processes to allow for a wider range of responses to stimuli and increase distress tolerance (Blackledge, 2007)

Cognitive Defusion has demonstrated efficacy in increasing tolerance of distress

extremity submersion in cold water (Hayes, et al., 1999; Takahashi, Muto, Tada, & Sugiyama, 2002; Masedo & Esteve, 2007)

electric shocks (Gutiérrez, Luciano, Rodríguez, & Fink, 2004; McMullen, et al., 2008)

carbon dioxide inhalation (Eifert & Heffner, 2003)

tinnitus (Hesser, Westin, Hayes, & Andersson, 2009)

food craving (Moffit, et al., 2012)

negative self-referential thoughts (Masuda, Hayes, Sackett, & Twohig, 2004; Masuda, Hayes, Twohig, Drossel, Lillis, & Washio, 2009; Masuda, Twohig, Stormo, Feinstein, Chou, & Wendell, 2010)

social embarrassment (Donald, et al., 2017).

Intervention Application - Cognitive Defusion

Passengers on a Bus Metaphor
- Was unable to deliver metaphor in a way that client understood

Labelling thoughts – Movie Title
- Client easily understood the activity
- Client was enthusiastic in session and said "It's worth a try"
- Used label "The Nightmare" in subsequent sessions to refer to thought
- Did not use technique between sessions because "I forgot" or "I didn't need it"

Funny Voices exercise was planned but not used due to emotionally heavy session

Intervention was abandoned due to lack of client interest and unrelated improvement in sleep due to starting melatonin

Outcome Measure

	0 Never (0 nights)	1 Once in a while (1-2 nights)	2 Sometimes (2-3 nights)	3 Quite Often (4-5 nights)	4 Frequently (5-6 nights)	5 Always (7 nights)
1) My child takes longer than 30 minutes to fall asleep after going to bed	0	1	2	3	4	5
2) My child has trouble falling asleep at bedtime.	0	1	2	3	4	5
3) My child awakes more than once during the night	0	1	2	3	4	5
4) After waking during the night may child has trouble returning to sleep	0	1	2	3	4	5
5) My child appears sleepy during the day	0	1	2	3	4	5

	Number of hours per night					
	11-13	9-11	8-9	7-8	5-7	less than 5
6) How many hours of sleep does your child get on most nights?	0	1	2	3	4	5

Figure: Pediatric Insomnia Severity Index (PISI; Byars, et al. 2017)

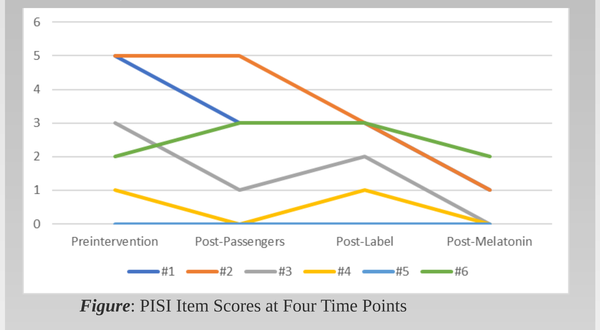


Figure: PISI Item Scores at Four Time Points

Measurement Issues

- Caregiver interpreted some items differently week to week
- Client reports that caregiver is not always aware when he wakes up
- Life events seemed to affect sleep substantially week to week
- Client reported daytime sleepiness and frequent napping after school for 2-3 h

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