

Existing literature on CBT-p and thought disorder

Disordered (disorganized) speech is a clinically accepted indicator of *thought disorder*, a symptom commonly present in psychotic conditions. Disordered speech exists on a spectrum from circumstantial speech and vague references to the rarer phenomena of clanging and phonemic word salad (Andreasen et. al. 1979). Because thought disorder often accompanies treatment-resistant schizophrenia (Barone et. al. 2022), it is likely that it is also less responsive to medication. So, it is worth exploring whether psychosocial approaches—such as CBT for psychosis (CBT-p), with modifications or supplementary interventions—could provide relief.

CBT-p is the gold-standard and evidence-based therapeutic modality for those with psychotic conditions (Keepers et. al. 2020). However, thought disorder is under addressed in the CBT-p and psychotherapeutic literature. Research suggests that therapists perceive thought disorder as a barrier to forming a therapeutic alliance, citing “illogicality” in client speech as an impediment to engagement (Cavelti et al., 2016)—it should be noted that no data on treatment alliance has been collected from the perspective of clients. Some studies examine feedback loops involving emotional salience and self-stigma in the initiation and maintenance of thought disorder (Palmier-Claus et al., 2017), but such investigations are scarce. In non-scholarly spaces, only one publicly available presentation on CBT-p for thought disorder exists, recommending “pre-therapy” techniques for “severely thought-disordered clients” (NEOMED 2021). Pre-therapy involves mirroring the client’s words and body language when they are considered beyond “therapeutic reach”—a loosely defined state in which they struggle to 1) communicate their mindset effectively and 2) integrate therapist feedback (Sommerbeck et al., 2006). While this approach respects patient boundaries, its efficacy for individuals with thought disorder remains unclear.

Among all CBT-p manuals, only one chapter explicitly addresses thought disorder—“Cognitive Therapy of Schizophrenia” (Kingdon et al., 2006). This chapter emphasizes clinical humility, suggesting that at least some instances of thought disorder should be understood as primarily communication difficulties rather than cognitive impairments. The authors note that disorganized speech often orbits a central theme, and identifying this theme can facilitate therapeutic progress. These themes may be interwoven in an atypical or rapid manner, which can place a significant cognitive load on the therapist’s own attention and working memory. If therapists struggle to track and decode these patterns, or the themes feel threatening to them, they may unintentionally project their frustration onto the client, labeling them as simply “illegible” (Hodgins et. al 2023). To clarify themes, the authors recommend using the five W’s (who, what, when, where, why) to help discern the client’s conversational objectives. The footnotes section features my example of how to code interwoven speech (Footnote 1).

While this is a useful starting point, the existing literature within CBT-p manuals and CBT-p based material, does not offer much guidance on how thought-disordered clients (Footnote 2) can actually improve their thought disorder and wellbeing. So I think that exploration of this topic is necessary.

Why I think thought-disordered clients have challenges engaging in therapy

When asked to respond to self-reflection-based prompts that others might answer with ease, the thought-disordered client’s mind may instead experience neural noise: spontaneous, fragmented thoughts that vaguely relate to the prompt. Such neural noise may present as

mental intrusions of literal speech, images, or subverbal, kinesthetic, or meaning-laden intuitions. This can be very distressing and lead to the maintenance of unprocessed emotions.

For example, if asked to explain why they feel deep fear when playing video games, the client's mind might present random musical fragments from past gaming experiences, music and sound effects from video games or even the quasi-hallucinatory yet uncanny presence of a person who mocked them for how they played. These fragments may overlap and switch unpredictably and relentlessly between topics. This is a complex challenge for these clients, extending beyond mere disorganization. Therapists, clinicians and psychiatrists often can't begin to grasp how complexly difficult it can be for these clients and how they would navigate such a state. All they often infer is that "the clients are disorganized" and that completing goal-directed tasks can be very challenging for them.

In such situations, metaphorically beating thought-disordered clients on the head to provide more and more structured responses may be deeply unproductive, frustrating the client and the therapist. Expecting the client's answers to converge in a cathartic "nexus", as might occur with non-thought-disordered clients, is often unrealistic within the time frame and level of patience available to the therapist.

I believe we can do better than the limited therapeutic options—CBT-p or otherwise, currently available for the thought-disordered population. Rather than stigmatizing clients, as I'll explore below, it's crucial to recognize that many of the cognitive mechanisms that support clear communication are simply altered in this group. That said, there's no need for pessimism here—what follows are a few selected therapeutic methods that could help clients with thought disorder improve their communication and sense of self, along with strategies for therapists to tune in better.

Therapeutic modalities that could be integrated with CBT-p for thought-disordered clients

Provide more cognitive training

Provide the structure for proactive control training

Clear communication relies on a) suppressing alternative interpretations, b) suppressing irrelevant information, and c) maintaining goal-directed mental representations (Sass et al., 2003). For a client struggling with insufficient suppression of alternative interpretations, this may show up as excessive ambivalence in conversation (e.g., a client shifting rapidly between different views, or even meta-levels of views, of someone's motives within a short time span) (Footnote 3). A lack of suppression of irrelevant information might manifest as speech that is richly interwoven with concerns (e.g. talking about emotionally charged interactions with others mixed with concerns about the weather mixed with priorities for the day) all within a short time period of communication—example in (Footnote 1). A lack of sufficient maintenance of goals may manifest as the transdiagnostic symptom of distractibility (Footnote 4).

Both suppressing alternative interpretations and irrelevant information fall under the branch of cognition termed *cognitive control*. Cognitive control is conceptually divided into two parts, proactive and reactive control. These two types of control are closely linked—proactive control deficits can lead to reactive control issues, especially when impaired context processing prevents the generation of an adequate response.

Proactive control involves assessing the environment for information to plan and prepare for future tasks, while reactive control involves suppressing irrelevant responses in favor of more goal-directed ones (Burgess et al. 2010). These two types of control are closely linked—proactive control deficits can lead to reactive control issues, especially when impaired context processing removes the possibility of an adequate alternate response.

Towards this point, research shows that reactive control can be indirectly trained through training proactive control in children with ADHD (Chevalier et al. 2014). Preliminary studies have also explored the trainability of cognitive control, particularly proactive control, in individuals with schizophrenia (Edwards et al. 2010). However, these findings have yet to be replicated in longitudinal studies or specifically within the thought-disordered population. Notably, the disorganization dimension of schizophrenia has been correlated with context-processing deficits, i.e., deficits in proactive control (MacDonald et al. 2005). Therefore, targeting the trainability of proactive control in clients with thought disorder seems like a promising avenue for therapy.

Provide the structure for auditory processing training

Communication clarity also benefits from a rich verbal working memory and efficient auditory processing. Verbal working memory has been found to be moderately to severely impaired in schizophrenia compared to other psychopathologies (Bowie et al. 2006). Auditory processing, which refers to the ability to capture relevant auditory information, is negatively correlated with severity of thought disorder (Moschopoulos et al. 2020). Further, auditory processing difficulties may feed into proactive control difficulties (as previously discussed) and worsen auditory interference within the client's thoughts and speech.

Towards this end, preliminary research into auditory training in schizophrenia has shown promise in improving verbal working memory and auditory processing, with successful outcomes after 50 hours of training (Fisher et al. 2016) and lasting improvements six months after training (Loewy et al. 2022). However, no studies to date have explored auditory training specifically in the thought-disordered population, though this remains a viable target.

Incorporation of cognitive training with CBT-p framework

Given the potential benefits, it seems valuable to include training of proactive control or auditory processing into CBT-p protocols. A recent paper emphasizes the importance of, yet the lack of, cognitive training for the schizophrenia population. Barriers listed in the paper include 1) low availability of therapists trained in providing cognitive training, 2) the fact that CBT-p is considered essential while cognitive training has lower emphasis, and 3) the damaging conflation of cognitive training for psychopathologies with lack of efficacy of “brain training” for neurotypical individuals (Wykes et al., 2024).

The closest to a dual cognitive training and cognitive behavioral framework is the Integrated Psychological Therapy (IPT) framework, a group therapy framework that targets both social skills and cognition in schizophrenia. IPT has shown improvements in symptoms, psychosocial functioning, and neurocognition with greater effects in chronic and older adults (Mueller et al. 2013). However, neither a head-to-head comparison of IPT with CBT-p nor a comparison of IPT with CBT-p + cognitive remediation, has been conducted.

Increase embodiment through creative arts-based therapies

To support the development of healthier self-narratives, engaging sensory materials from one's life—such as narratives or music—can be helpful. When cognitive faculties that aid in

maintaining complex verbal information are impaired, these sensory techniques can serve as compensatory strategies, enhancing the sensory elements of the information. Research shows that as the brain's representation of the continuum of abstract to sensory-based language proceeds rostrally to caudally (Brysbaert et al., 2014), and clients with thought disorder often have deficits in rostral areas, particularly the dorsolateral prefrontal cortex which is prominently involved in abstract thought (Kuperberg et al. 2008), engaging sensory modalities can help individuals ground abstract thoughts in physical experience. This is akin to how children use their fingers to count or how scholars may glance upward to retrieve additional details to a prompt.

Offering clients creative art therapies like Narrative Therapy or Music Therapy may aid in memory consolidation, emotional processing, and creating cohesive self-narratives (Vaisvaser et al., 2021). This aligns with the principles of *embodied cognition*, which posits that cognitive processes are deeply rooted in the *embodied* interactions with the environment, and that thinking, learning, and memory are not purely abstract but are influenced by sensory and motor systems.

Provide the structure for Narrative Therapy

Narrative Therapy is a systematized therapy that helps clients understand and reshape personal stories to build a stronger sense of self. It draws inspiration from both Māori wisdom and postmodern philosophy (Epston et al. 1992). Similarly, many Indigenous cultures in the Americas utilize narrative-based like healing practices, emphasizing the importance of retelling experiences in ways that highlight resilience and wisdom (Mehl-Madrona et al., 2015).

Dr. Mehl-Madrona's research suggests that understanding and constructing narratives activates widespread brain regions, including those involved in speech production, cognitive control, theory of mind, and, importantly, sensory processing (Mehl-Madrona et al., 2015). Further, there is evidence to suggest that the construction of meaningful narratives about our experiences has much to do with the building of what is called the *autonoetic self*, or the representation of *self* across time and space (Wheeler et al. 1997). The building of the autonoetic self involves both accurate recall of life events and more fundamentally, the adequate formation of memory through embodying life events fully with the senses. It is possible that thought-disordered clients' fragmented speech is yes, due in part to cognitive deficits in the online maintenance of information. But it is also likely that thought-disordered clients' fragmented speech may be an authentic reflection of chronic disembodiment, *reflecting challenges with encoding of memory itself*, rather than merely challenges with the online maintenance and sequencing of information (Tonna et al. 2023).

Thus, it's likely some thought-disordered clients may exist in a perpetually disembodied fragmented, dream-like state, lacking the "post-processing linearizing finesse" that many take for granted. For these individuals, there may be value in practicing, perhaps for the first time, the process of bringing coherence to disjointed, half-remembered, and barely comprehended life experiences—experiences they have drifted through much like a drug-induced haze of confusion, chaos, and suffering. However, other clients may in fact have already coherent narratives but struggle with finding the right words and communicative polish. Given enough time and space to express themselves fully, such individuals may be more understandable than they initially appear, and their ability to make meaning of their lives could be significantly improved.

There is currently no data on using Narrative Therapy directly with the thought-disordered population specifically. However, preliminary evidence shows that Narrative Therapy in the broader schizophrenia population can improve negative symptoms, theory of mind, and social functioning (Gürcan et al., 2021). Additionally, Narrative Therapy-adjacent techniques within an Indigenous philosophy-based clinic has been effective in managing psychosis without medication (Mehl-Madrona et al., 2014). I suggest further research into the efficacy of Narrative Therapy for thought-disordered clients, as it offers a culturally diverse and neurobiologically plausible method that deserves large-scale testing.

Provide the structure for music therapy

Comprehending and creating music requires intricate brain coordination and precise timing. Some describe the world of individuals with thought disorders as "timeless" and "disintegrated," suggesting that language impairment is only the surface of a deeper issue (Miller et. al. 2016). Both music and spoken language function as "languages" in a sense—used for relating to others and sharing temporal structure, prosodic variation, and complex symbolic representation of ideas (McMullen et. al 2004). It's possible that some clients' disorganized speech may not be reflected in their music that may instead have inexplicable harmony and appeal. It's also possible that people with more severe forms of disorganization may have similar challenges with creating music as with speech.

One of the few studies on creative arts therapy with thought-disordered clients proposes three domains for assessing both language and musical expression: 1) *Temporality*, which indexes how quickly one's expressions change along with the rate/tempo of expressions, 2) *Affect*, which indexes the form of the expressions and the accompanying intensity of one's facial/bodily expressions, and finally 3) *Relationality*, which indexes the level to which one's expressions are rooted in reality and the connectedness of ideas. The author proceeds to fit their 3-part construct onto a few extant case studies on music therapy in schizophrenia. The author suggests that music therapy in their opinion, is likely to have shifted clients' expressions to a less thought-disordered and stable position on the axes of temporality, affect and relationality (Miller 2016).

It should be noted that the research is extremely sparse and preliminary on this topic. Miller's study is the only one in existence even suggesting a link between music therapy and improvement in thought disorder. I suggest music therapy be available and many more such studies be conducted in this population, and that such training may complement the auditory training suggested in a previous section.

Provide the structure for MERIT (MEtacognitive Reflection and Insight Therapy)

The late renowned Dr. Paul Lysaker developed MERIT as a therapeutic approach aimed at building metacognitive capacities in individuals with psychosis. His research has shown that MERIT can improve self-awareness, social functioning, emotional regulation, and understanding of others, with some clients maintaining or even improving these abilities over time in a randomized controlled trial (Hasson-Ohayon et al., 2020). It's possible that the slow adoption of MERIT has been due to significant therapist training and overhead to continually assess patients using multiple scales for metacognitive capacity of themselves and others, all the while deciphering how well the patient's narrative is internally consistent (Lysaker et. al 2020).

MERIT could serve as a complement to CBT-p by providing a deeper exploration of the auto-noetic structure that shaped a client's problematic beliefs once those beliefs have been identified. Additionally, MERIT's self-cohering strategies may help clients who struggle to identify consistent beliefs in the first place, making it a useful preliminary framework before engaging in CBT-p. While the potential for MERIT in the thought-disordered population is compelling, no clinical trials have been conducted to date. However, a case report documented an 18-month MERIT intervention with a thought-disordered client, showing improvements in the client's narrative descriptiveness and coherence as perceived by the therapist (Hamm et al. 2016).

Some case studies conducted by Dr. Lysaker and his colleagues have used pre-MERIT-like approaches with thought-disordered clients. In one study, intensive dialoguing and reflecting back of different aspects of the client's "selves", over a few years, led to the therapist perceiving higher cohesion and less fragmentation of the client's narration of events (Lysaker. et. al 2006). This was a unique study due to the therapist's patience, long duration of therapeutic intervention, and usage of creative interpretation when working with a client considered otherwise "too difficult to engage".

I see advantages in MERIT and think it is net beneficial to be more accessible to clients. However, I don't agree with some of practitioners of this modality's subtly diminishing interpretations of thought-disordered clients' narratives, which I will get into in the next section.

Non-modality-specific therapeutic techniques

There is much that can be done by therapists outside of the CBT-p or other standardized therapeutic frameworks, to help clients feel heard and understood. Below I will explain a few things that therapists can keep in mind when working with clients.

Reframe thought-disordered speech by considering therapeutic bias

It bears repeating that the often therapist-rated "cacophonous" speech of thought-disordered clients is, in many cases, the most accurate reflection of their reality that they can articulate. Viewing their speech through this lens may help reduce the unconscious projection of a therapist's own confusion or frustration back onto the client.

Consider the following passage from a client considered merely "cacophonous" in literature (Lysaker et. al. 2006):

"Because it's hard finding yourself again. Anybody can come up with a question and turn the whole picture around. Anybody can find an answer and they can't stand you. But if you got something to hold, that you can hold against them, that'll tear you to pieces and tear them to pieces. And somebody may be sticking up for your life on one side, and on the other side it may be your own family. They don't want them to take your part."

It is impossible to know for sure if the referents to people and situations mentioned in this paragraph are real, imaginary or even consistently used--that is not in question. However, it is an interesting puzzle to pose to oneself as to what is so drastically different in this equally vague yet mysteriously-more-legible passage:

"Because it's hard putting yourself back together again. There's been a lot of trauma in my life. It's had a big toll on me. Anyone who says otherwise has no idea about how my

life has been. I just haven't put myself back together again. It's like my life has torn me apart and it's been a super rough going."

Some may venture that the second passage features in contrast to the first: 1) standardly idiomatic expressions, 2) a seeming cohesion of a theme being the effect of trauma on identity, and 3) the instances of the use of vagueness versus specificity follow social conventions. However, this is hardly the larger point I think is worth making.

Encouraging clients to be able to produce more speech towards that featured in the second passage, through whatever means possible, seems like a conventionally held but not necessarily client-centered move. While it would be nice if there was a neat correlation between production of passages like the second and subjective ratings of wellbeing from clients with a history of thought disorder, such a relationship is not well-specified in the literature. Instead, this seeming puzzle can be used as an opportunity to investigate how much therapists' and more generally, clinicians' own ease of understanding and efficiency takes priority to encourage clients to speak more like in the second passage.

I venture an intuitive guess. The client in the first passage sounds like they are experiencing a deep crisis of the self, where they may be potentially grappling with intrusive thoughts forming urgent questions, they feel they are compelled to answer, causing their own previously stable mental fortress to collapse under the weight of self-inquiry and neural noise. Potentially there are family dynamics that are strained, where family members' perspectives that are ego-dystonic to the client may be "ripping the client's (mind) apart", with which perspectives from more ego-syntonic biasing individuals may be deeply clashing. Obviously, there is no way to know for sure. Nor is it recommended in therapeutic modalities in general for therapists to superimpose a potentially more structured and legible interpretation onto the client. However, at the very least, it may be valuable for therapists to creatively engage with and jot down potential interpretations of speech like the first passage beyond that the client is "cacophonous". Clients may be making nuanced and meaningful points that are more complex than the default, overly reductive explanation of "trauma disrupting the self."

Understand that some clients are being authentic to their actual mental experience

Echoing points from earlier sections that thought-disordered clients often lack the 'post-processing finesse' that many take for granted, we may observe potential markers of disorganization in the following passage. These may include reduced grammatical complexity, increased perspective shifts, increased associativity and underutilization of propositional language:

"People have changed my relationship with the underbelly already. I get into manic angry states and think I'm the shit. Then I remind myself others have seen actual real shit. This isn't a joke where I feel insane and then go to downtown at night to see what happens. A recent art museum experience too, was impactful, feeling semi religious, like entering a cathedral. Sacrosanct and orchestrated yet allowing freedom of thought within the confines of the medium being seem, behavioral control for an unbridled disorganized at times like myself while also encouraging quiet freedom."

I recognize that researchers, clinicians and even therapists would intuitively or quantitatively rate this as moderately disorganized or having a "lower-than-desirable" analytic thinking score,

which indexes how likely the client is to exhibit logical, systematic and structured thinking based on grammatical features discerned through natural-language processing-based methods (Silva et. al. 2021).

However, I believe such a construal is reductive, and that the passage above reflects a somewhat chaotic but real-time narration of what is actually happening in a client's mind as they come to a major shift in their perspective. Namely, that the client is alternating between 1) feeling powerful, "manic" and overconfident, with 2) feeling a humbled sense of self in the presence of artwork. This tension between perspectives ultimately leads to a reflection of how in the presence of artwork in the "sacrosanct setting of an art museum", the client experiences a unique, and potentially positive form of behavioral control through exercising their freedom through creatively interpreting artwork while still following social rules. The client ventures that though this is a form of "behavioral control", they have come to prefer it (even if temporarily) to the outwardly gauche and potentially dangerous way of exercising their freedom through "going downtown at night" (to presumably dangerous areas).

There is usage of unconventional linguistic form, such as reference to themselves as an "unbridled disorganized", as well as the usage of unconventionally lumped words such as "manic angry state" which may be unusual for a clinician to hear. However, none of this may be actually inaccurate to the client's actual experience of these perspectival wars and shifts happening in their mind.

Favoring a "high-analytic score" rewriting to such a passage like below removes much of the chaotic nuance the client is trying to relay. The below passage is also interestingly way more verbose, so it could be noted that some thought-disordered clients may be cleverly condensing many themes (albeit somewhat confusingly to the listener) with fewer words:

"My perspective on the 'underbelly' of society has already shifted due to interactions with others. I sometimes experience manic, angry states in which I feel powerful and important, but I counterbalance this by reminding myself that others have encountered far more extreme and objectively challenging circumstances.

I recognize that my impulses are not simply a matter of feeling detached from reality and seeking chaotic experiences for their own sake. For example, I recently visited an art museum, which had a significant emotional impact on me. The experience felt almost religious—similar to entering a cathedral—because of its structured yet immersive nature.

The museum environment was both carefully curated and intellectually stimulating, creating a controlled space that facilitated focused contemplation. For someone like me, who sometimes struggles with disorganization, this setting provided a productive balance: it imposed a degree of behavioral regulation while simultaneously fostering a sense of mental freedom."

The use of phrases like "counterbalance" and "significant emotional impact" in the rewritten passage may overstate the stability of the client's perspective on "quiet freedom" from the art museum—an experience that was likely fleeting, but one which the client may be attempting to integrate into a wider network of experiences. Additionally, the higher-analytic version removes a key feature of the original: the client's playful deviance and potential metacognitive

awareness. In the first passage, they “break the fourth wall”, directly addressing someone beyond the listener to clarify that their mention of being “angry and manic” was not an attempt to dramatize past behavior but rather an honest reflection on their shifting internal states. This is also evidenced by them stating that despite appearances, they recognize that there are others who have “seen real shit” (bad situations, adversity) and that the client is themselves striving to maintain humility.

More neurotypically inclined speakers might express this kind of self-awareness in action-verb-oriented or first-person fact-based language, such as “I want to be clear—I’m not joking” rather than somewhat “disjointedly” uttering “This isn’t a joke.” The thought-disordered client’s reference to an “other not in the room” who has humbled them might carry a slightly hallucinatory quality, which could contribute to the indirect stigmatization of this speech pattern or its association with patient distress. However, it’s also possible that such an utterance could be part of the client’s own playful style of communication. Perhaps it’s good to give this a second thought.

These nuances matter. If the therapist is truly attuned to the client’s voice, they will recognize that “low-analytic thinking scores” or clinician ratings of disorganization do not inherently mean that the speech lacks depth or warrants correction. Instead of prioritizing conventional structure, therapists should seek clarification from clients and consider how seemingly disorganized speech may encode layers of meaning that are vital to the client’s self-expression and perspective-building.

Pick up on clients’ distress

Although this pattern does not apply to all individuals with thought disorders, some clients display more disorganized speech when emotionally heightened. This may include a confusion of tenses, mixing past, present, and future, as well as descriptions of societal alienation that mirror the client’s real-time sense of disconnection from their own speech. This alienation can manifest in various ways, such as sudden topic shifts, projection of concerns onto the therapist, or even more extreme symptoms like phonemically disintegrated speech. Rather than viewing such expressions as mere “barriers to therapy,” therapists can interpret them as signifying important themes and acknowledge that the client may be in a heightened emotional state (Bettis et al., 2024).

Think about whether therapy is actually reducing self-stigma

Research into neurobiologically based conditions is crucial for understanding and treating clients who experience distress due to their symptoms. However, it’s important to recognize that after patients are encouraged to excessively self-monitor, they need to be properly rehabilitated. The literature on this is notably lacking, especially for thought-disordered clients.

While some thought-disordered clients may benefit from increased metacognition there are certainly others who won’t. In the literature on schizophrenics at large, the “insight paradox” is reported, where more awareness of the clinical interpretation of symptoms is negatively related to quality of life (Davis et. al 2020). While there is no literature that directly supports the “insight paradox” within the thought-disordered population, it is very plausible that since thought disorder represents a very fundamental alteration of the experience of *thought* itself, that potentially adverse self-monitoring feedback loops may present themselves to clients who have increasing awareness of the pathologized nature of their experience.

Thought disorder, the prominent symptom of the older term *hebephrenia*, an archaically termed subtype of schizophrenia, has literally no positive or even neutral portrayals in the literature. Some studies suggest greater brain volume loss in this subtype compared to other forms of schizophrenia, such as those marked by delusions or paranoia (Barrera et al., 2019). However, it's important to note that no studies have fully analyzed how much of the observed brain volume loss is due to structural factors or accompanying psychological distress.

Indeed, the encouragement of clinical framing and excessive monitoring of inevitably disorganized mental states, may very well perpetuate the very hyperreflexive “initial conditions”, characterized by excessive metacognitive recursion and othering of oneself (Fuchs et. al 2018) that likely initiated the schizophrenic condition, though this remains only my hypothesis. It's possible that some clients may thus end up in a “bad valley” of metacognitive understanding. As in, clients may gain deep understanding of their condition and as a result, may even regress to an earlier stage of development where hyperreflexivity dominates painfully—potentially punctuated by moments of thought disorder.

For these clients, mindfulness and acceptance-based approaches specifically targeting the appraisal of thought disorder, could be more helpful, especially when symptoms become distressing due to societal judgment. Such approaches are widespread and normalized for conditions that involve predominantly anxious and obsessive thoughts. So I venture, while recognizing that some instances of thought disorder could very well *be* actual expressions of anxiety and obsessiveness, could not certain instances of thought disorder, however socially stigmatized, also be encouraged to be appraised by the client as such, to their betterment?

While a balance between acknowledging potential negative impacts and accepting what may be benign is necessary, the current consensus is too inclined toward viewing any form of thought disorder as indicative of disease. I believe therapists, clinicians and researchers should carefully explore this interpretation.

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Footnotes

1: Example of *interleaving of themes* in a client's speech when they are asked how they are doing:

"Oh hi. I just smoked a cigarette. **And I'm trying to convince myself that it's bad** because even though the antipsychotics are making it so that I don't get as much of the negative effects, like some of the negative anxiety inducing effects of cigarettes where I get cold sweats or shaking.. all those things that I used to, it doesn't mean **they're still doing (sic: still not doing) damage and everything on my body because I still have the same .. breathing problems sometimes.** Because, like cigarettes, you know, they can cause all sorts of diseases, you know, beyond just like cold sweat and like anxiety right on the whole body, they can do that. **I still cough,** I don't notice the same level of distress from it because of some of my pills. **And once that effect wears off I'm gonna suffer the same amount. And I'm just going to suffer anyway later on.** I sometimes think like I'm losing hair and I'm bald and what's the point anyway but I'll look even worse so I just have to think about it like that, and like .. the other day I got a wig. Kind of like a famous Youtuber you know? **Like I'm dressing up you guys,** showing up living life. I really want to smoke more weed now cuz like weed has been like really awesome. **So yeah I was thinking of a lot of things."**

Coded themes

Direct answer to the therapist's opening question

Information about how antipsychotics are reducing anxiety for the client, particularly from smoking cigarettes

How the client appraises the adverse effects of smoking cigarettes

How the client feels they are going bald and pessimistic about life

How the client feels they want to just live life

How the client enjoys weed; Seemingly irrelevant but may be a coping strategy for the anxiety from cigarettes or an attempt to 'boost their high' from smoking cigarettes

2: I recognize that people who experience thought disorder may vary in what they may wish to be called. They may even disagree on whether the condition is an illness or something to "treat away". I respect these viewpoints and only wish to reduce the distress accompanying whatever symptoms are classically thought of as "thought disorder". However, for the purposes of this writing, I will refer to people who experience/exhibit "thought disorder"/"disorganized thinking"/"disordered speech" as "thought-disordered clients" or "clients", while welcoming feedback and not intending any disrespect to this population.

3: **Example of excessive perspective switching driven by client's self-labeled phenomenon of reverse-mirroring:** "To make this more clear, what happens to me at least is a *reverse mirroring* process. **Why reverse-mirroring? Because my own mental state becomes feedback to generate mentalizations of other people, rather than the traditional mirroring where actually observing someone else's mental states via affect, language, behavior causes me to have a certain mental state.** So in *reverse-mirroring*, I start to notice my own mental state like "She is reading a sentence of a book" but it's much more quasi-hallucinatory I'd say. At the same time I recognize that the sentence in the book is merely that, but my mind can't help but think about how people I would care not to remember would process that same sentence, and the overwhelming awareness of other people potentially having that same mental experience makes my own previously pristine experience muddled. This could also occur on facial expressions. When I make a certain face that gets transmitted to my memory banks to conjure up people I don't want to remember making that same face in my mind's eye and remembering the situations in which they might have made that face. **At that point, my focus on the present has been corrupted. There are too many threads, both my own pristine one originally as well as the imaginations of others' that result in what would appear like a severely disorganized mind."**

4: **Example of lack of goal maintenance of the goal being to arrive to a meeting on time and the client being distracted along the journey:** "I was having a nice walk to the bus stop in anticipation of riding to arrive to a meeting, marveling at the foliage around me and noticing all the shapes of the pine leaves and so forth. **But in the back of my mind there were a lot of OCD thoughts competing for attention.** I stumbled upon a tree, not literally, more with my eyes, near Safeway. This was shortly after I entered a nearby park in the hopes of finding a "cool back entrance" to go to the Safeway. **Perhaps I was doomed from the start, because I had changed my mind on going to Safeway at the spur of the moment to buy coffee instead of at my usual QFC near my house. Looking back, I ended up losing more time going to Safeway because I neither got my coffee (they were out of stock), and I missed my bus because I was wandering around Safeway.** Further, despite my gut intolerance to cherries, I had encountered a cherry tree on the way to Safeway and wanted to eat the fruit off of it. This filled me with great delight because I loved free fruit. I impulsively grabbed the fruit off the tree and ate it and decided to go to Safeway because I was excited by the secret back entrance. **After wandering around the Safeway some time I realized I was completely late for my meeting and had missed the bus."**

