# An Initial Process Evaluation of "Thinking Space"

A Cognitive-Analytic Therapy-Informed Project for Young People in Secure and Residential Care


Full Report

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The Why Not? Trust
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## Introduction

Children and young people in conflict with the law are more likely to have adverse childhood experiences, trauma, and complex mental health needs than those without justice contact (HM Inspectorate of Probation, 2023). Poor mental health and offending can become a cycle for justice-involved youth, in which each perpetuates the other, and this is likely to lead to poorer outcomes and increased risk of imprisonment in adulthood. Therefore, it is crucial to work to understand the unique and complex needs of this population of young people and find suitable solutions to the early intervention needs of young people in or at risk of becoming in conflict with the law.

It is well known that both youth in secure care and adults in prison are significantly more likely to have one or more mental health diagnoses, often stemming from abuse or neglect in childhood. Recent research from the University of Glasgow found that, of the young people in a Scottish young offenders' institution, 86% had a mental health condition, with almost half meeting criteria for four or more conditions (Moran et al., 2023). Over half had a condition indicative of attachment trauma, with a diagnosis of either Reactive Attachment Disorder (RAD), Disinhibited Social Engagement Disorder (DSED), or Borderline Personality Disorder (BPD). Further, three-quarters of young people had experienced some form of abuse or neglect, with nearly seventy percent having experienced four or more adverse childhood experiences (ACEs). In looking across Scotland, a 2024 report by HM Inspectorate of Prisons for Scotland similarly found that about seventy percent of those under the age of twenty-five in the Scottish Prison System had a mental health need, with 36% also requiring support for drug use and 29% for alcohol use.

These findings echo those from other studies and reviews conducted globally. A systematic review by Malvaso et al. (2021) pooled data from across thirteen countries that showed that 87% of justice-involved young people had experienced at least one traumatic event. Dalsklev et al. (2019) determined from included studies that rates of childhood physical and sexual abuse were high among the prison population and were typically even higher among those who go on to reoffend. Finally, in a US-based study of approximately 23,000 justice-involved youth, data on adverse childhood experiences and criminal behaviour found that for each additional ACE, there was an increase in risk of becoming a "serious, violent, and chronic juvenile offender" (Fox et al., 2015). The research from Scotland and beyond indicate that there is a clear connection between childhood trauma, mental health issues, and offending behaviour that cannot go unaddressed if wanting to improve outcomes for youth in or at risk of becoming in conflict with the law.

### *Barriers to Support*

Unfortunately, many young people in secure care, prison, or even residential care are unable to access appropriate, trauma-responsive, and individualised mental health treatment when they need it. For example, despite the high number of young people in the Moran et al. (2023) study who met criteria for a psychiatric diagnosis, less than three percent had received a psychiatric or psychological assessment while in prison. Further, only about eight percent received talking therapy or a trauma-related service to address the root causes of their behaviours. It can reasonably be assumed that the situation is similar in many other corrective or secure centres. Currently, the Child and Adolescent Mental Health Service (CAMHS) is expected to provide the mental health care needed by children and young people in the care system. The reality is, however, that CAMHS does not have the resources or availability to provide in-depth talking therapy or trauma work to every child in secure or residential care who requires it. According to the Children and Young People's Centre for Justice (CYCJ), the complex mental health needs of children and young people in conflict with the law require early intervention, and this idea is reinforced by policies and Scotland-wide mental health strategies. Regardless, CAMHS remains focused on crisis response. This results in a large portion of young people in secure care "slipping through the cracks" – especially when they show symptoms of multiple diagnoses, but never quite meet the threshold for specialist care (CYCJ, 2024).

*Thinking Space*

Thinking Space is a cognitive analytic therapy (CAT) informed project, providing young people the opportunity to explore their pasts, understand their thoughts, feelings, and behaviours, and establish alternative, more effective ways of coping. Thinking Space was originally developed for implementation in secure care centres, but has more recently been expanded to also include young people in residential care who have similar backgrounds and needs to the young people in secure care. In contrast with most support provided to young people in the care and justice systems, Thinking Space is completely confidential (unless there is a serious safeguarding concern) and information that young people share in the sessions is not shared with other professionals in their lives. Thinking Space takes a relational approach, emphasising the importance of both the young person's past and present relationships as well as the relationship between young person and practitioner. A principal feature of CAT that also forms the basis of Thinking Space is the view that interpersonal relationships throughout our lives impact how we presently relate and respond to others, focusing on the underlying feelings and behaviours that arise from and contribute to our relational roles.

CAT has been used successfully for a variety of mental health needs but is typically suited to those who have experienced relational trauma. For example, most of the evidence for CAT has come from its use with those with BPD, a diagnosis with strong links to childhood adversity and maltreatment (Hallam et al., 2020; Porter et al., 2020). No known empirical studies have trialled CAT or a CAT-informed approach with offenders, nor young people involved with the justice system or secure care. However, some have positioned CAT as a useful modality for addressing offending behaviour (Roper, 2018; Stowell-Smith et al., 2006; Willis, 2010). Further, other therapeutic modalities that emphasise the importance of relational work in recovering from complex trauma have been successfully used with children and young people with experience of care, such as Trust-Based Relational Intervention (TBRI) (Misevičė, 2024; Parris et al., 2014; Purvis et al., 2013). Similarly, one study of a Developmental Trauma and Attachment Programme for young people in a residential setting who displayed disruptive behaviour found that nearly one in four young people who received the programme reported significant clinical changes in mental health and externalising behaviours (Pester et al., 2021).

One way in which CAT provides a particularly valuable framework from which to work with young people who have experienced interpersonal trauma is that its main feature is exploring relationships and reciprocal roles, or in other words, the identities we form in response to our experiences of others. For those with backgrounds of maltreatment especially, these roles can become very rigid and unintegrated, causing distress that could potentially lead to offending (Llewelyn, 2003). In considering how this materialises is the context of interpersonal crime, it is thought that these learned roles can switch, in which a person feels the need to take on the opposite role of that they held in childhood (Pollock & Belshaw, 1998). Therefore, becoming aware of how one is emulating these roles and learning alternative ways of relating and being may have positive implications for reducing offending behaviour aimed at other people. The focus on how present thoughts, feelings, and behaviours have originated from past, formative relationships distinguishes a CAT-informed approach from typical interventions in justice settings, as the latter tend to emphasise behaviour change rather than addressing the internal mechanisms underlying the behaviour and allowing for the emotional healing that is needed (Yu et al., 2021).

Thinking Space is currently delivered in one secure centre and one residential care unit in Scotland. Young people are told about Thinking Space either by the practitioner or staff in their accommodation and can volunteer themselves to participate if they are interested. Young people then meet as and when suits them. The process is time-limited, honouring the CAT-informed foundation of the project, and young people finish once they have completed the four main stages of CAT (sharing story, mapping, coping, ending). At the beginning, young people share their background and life story from their perspective – the practitioner is not given any information about the young person from staff prior to meeting with them. Through this, young people are encouraged to find themselves in their story and focus on the impact the past has had on them. They then complete their "map" with the practitioner, which outlines their attachment relationships and reciprocal roles (a sample CAT map is provided in the appendix). In the coping stage, young people learn new coping strategies and work to let go of ways of coping that no longer serve them. Finally, they experience a clear and inevitable ending with the practitioner and when possible, receive a letter from the practitioner outlining the work they have done

together and the practitioner's understanding of that young person and their story. Young people usually finish the process in less than twenty sessions, although they may meet with the practitioner for a longer period if needed.

*Aims & Objectives*

The outcomes that young people may receive from engaging with Thinking Space include but are not limited to:

- Young people have a better understanding of what they value and seek in relationships.
- Young people gain an understanding of how their past experiences continue to impact them now.
- Young people have an awareness of the reasonings for their behaviour in relationships e.g. control, lack of empathy or issue with authority.
- Young people have the ability to communicate their needs in relationships.
- Young people have the ability to sustain and maintain relationships.
- Young people can recognise negative social groups or relationships.
- Young people have the social skills to reconnect with positive relationships from the past.
- Young people gain a sense of self.
- Young people recognise how their behaviours affect others.

Two processes that may mediate the outcomes of a CAT-informed approach regarding feelings and behaviours are emotional regulation and emotion recognition, both of which are also features of emotional intelligence. According to the model by Mayer and Salovey (1997), the abilities of emotional intelligence include the following: accurately perceiving the emotions of others, understanding the emotions of the self, using emotions to make decisions, and managing or regulating emotions. Our early attachment relationships, ideally, provide a strong foundation for being able to recognise and regulate emotions. When one's experience as a child is that their emotions are not understood or appropriately managed by their caregivers, this makes it much more difficult to regulate later in life (Wilcox et al., 2020). Further, when the development of the brain systems that control regulation are disrupted, as is often the case with young people who experience early trauma, the higher regions of the brain that are responsible for consequential thinking and meta-cognition can be affected, weakening skills that could reduce offending behaviour (Bollinger et al., 2017).

It is also worth noting that to be capable of empathy towards others, one must first become empathetically aware of the same emotions in themselves (Wilcox et al., 2020). Further, emotional literacy is a key component of emotional intelligence in a young person, allowing them to relate to and understand their emotions (Steiner, 1997). It allows them to use speech, body movements and other forms of communication to express their thoughts and feelings. Lack of emotional literacy can lead to young people being unable to manage their emotions and struggle to understand the emotions of others. Emotional Literacy involves knowing your feelings, having empathy, and managing emotions. By providing a confidential space and the warmth, deep listening, and social connection required for effective emotional support (Bradshaw et al., 2022), Thinking Space helps young people learn to manage and understand their emotions, thus improving their emotional regulation, literacy, and intelligence.

Through the CAT-informed process, young people will be supported to develop their self-awareness through reflecting on their attachment relationships, how these relationships put them into certain roles, how they may be continuing to replicate these dynamics in current social relationships, and the consequences that holding rigidly to these roles might be having on themselves and others. Following this, young people will be encouraged to find alternative ways of coping that are better suited to their present. Through this process, young people will hopefully be better able to recognise their own emotions, use that awareness to guide decisions going forward, and learn new ways of managing difficult emotions.

**Methods**

*Recruitment & Consent*

Thinking Space was delivered in one secure care centre and one residential care centre in Scotland. All young people (YP) were recruited directly by the practitioner, either through speaking to YP in classrooms (in secure centre only) or after staff suggested to the practitioner particular YP who may benefit from participating. In the initial session, YP were given an overview of Thinking Space, the stages it would entail, and what they may expect to get out of the sessions. YP were told that everything they said to the practitioner would be kept confidential and details of their story would not be recorded. They were also made aware that information would only be shared with staff in their setting if the practitioner was concerned for their imminent safety or that of others. During the first meeting with the practitioner, YP were given a consent form to sign prior to starting the process. This informed YP that while what they share in sessions would be kept confidential, the practitioner would share themes from the sessions with the researcher for the purpose of evaluation, but that any identifying information would not be shared. All YP were told that they could withdraw their consent at any time and ask for their information to be omitted from evaluation. YP were also asked to voluntarily provide demographic information to assist with the evaluation of Thinking Space.

*Evaluation*

The framework for this evaluation was underpinned by the Medical Research Council's (MRC) guidance on the process evaluation of complex interventions (Moore et al., 2015). A process evaluation aims to not only understand if an intervention is working, but *how* it is working. Complex interventions are both complex in design and delivery, resulting in change mechanisms occurring at multiple levels. The MRC guidance provides recommendations for undertaking evaluations of interventions that may be context-dependent, the setting of which making responses to the intervention less predictable. A process evaluation of a complex intervention accounts for the interplay of intervention delivery, participants, and the environment in which both exist, allowing for a deeper understanding of what causal mechanisms and contextual factors are associated with outcomes.

They key functions of a process evaluation of a complex intervention, as outlined by the MRC guidance, include context, implementation, mechanisms, of impact, and outcomes. In simpler terms, evidence is to be collected regarding: how both the space and broader environment in which the intervention is delivered impacts how the intervention works; how the intervention was delivered, including any adjustments that needed to be made to the original design due to the context; what expected or unexpected pathways resulted in how participants interacted with the intervention; planned and unforeseen outcomes.

<u>Context</u>

Certain contextual factors were considered while completing analysis of the data collected. For one, while this intervention was being implemented, Scotland introduced a major policy change affecting young people in conflict with the law and secure centres, this being the end of using young offender institutions (YOIs) for YP under 16. Previously, young people between 16-18 could go to YOIs, or youth prisons, for crimes. However, the new legislation ended the use of YOIs for under-18s, meaning that these young people would now need to be housed in secure care. This inevitably created additional strain on the secure care sector, which was already facing challenges with lack of capacity. Further, young people who have been accused of or proven to have committed crimes that would not have previously met criteria for being housed in a secure centre are now being placed in secure facilities, potentially changing the demands on secure centre staff.

<u>Implementation</u>

After each session, the practitioner recorded themes of her sessions with the young people. In line with Thinking Space's premise, this did not include detailed accounts of what each young person talked about, but rather general themes of discussion (ex. family substance use, self-harm, being subject to violence, etc.). The practitioner would also record what

stage of the CAT process the young person was in or had completed, including any key activities that were done (ex. mapping, practicing coping strategies). This allowed for an understanding of the process taking place, without the sharing of young people's personal information and stories. A sample log entry can be seen below:

| Name | Session Date | Processes | Themes |
|---|---|---|---|
| Susie | 01/01/2025 | Mapping, starting to explore alternative ways of coping | Rejection, lack of affection in childhood, using substances to cope |

This was then compared with the traditional CAT procedure, in order to understand the ways in which a CAT-informed approach may need to be adapted to function best in the context of a secure care setting.

Mechanisms of Impact

The log further serves as a record to examine the mechanisms of impact for each young person. Although causal relationships cannot be identified through this, it can provide some insight into what stages of the CAT process may be most impactful, as well as how other factors such as length and number of sessions impact on outcomes. Further, by knowing a bit about how each young person's baseline and how they consequently engaged with the sessions, we may observe a trend in what "types" of young people can benefit most from Thinking Space, and why.

Outcomes

The primary outcome assessed was the extent to which each young person found the intervention to be useful. Therefore, in-depth mental health assessments were not used, but rather a brief 10-item questionnaire followed by open questions. These questions asked participants to rate items regarding whether they better understood their own thoughts, feelings, and behaviours, and whether they believe that Thinking Space influenced their ability to cope and form trusting relationships. Open questions expanded on this, as well as aimed to identify any barriers or facilitators that the young people experienced while engaging with the intervention. The full participant evaluation form can be viewed in the appendix.

A brief evaluation form was given to a staff member for each young person. Staff members included teachers (in the secure care setting), key workers, and other care workers, depending on who knew the YP well enough to be able to provide an account of their progress since commencing with Thinking Space. Staff were asked to write their observations regarding any changes in the young person's emotional wellbeing, self-awareness, behaviour, relationships with other young people, and relationships with staff. The full staff evaluation form is also in the appendix.

Some outcomes were able to be gathered through the practitioner logs. While these are from the subjective view of the practitioner, the logs nonetheless provide additional observations that can corroborate what has been shared by young people and secure centre staff. Session logs were used to create the YP journeys that were then collated to understand the background of young people who participated, their key concerns, and improvements made throughout the process.

**Results**

Six young people (YP) who had completed all the main CAT stages – sharing their story, mapping, practicing alternative ways of coping, and ending – completed evaluation forms. This covers any young people that started and completed their Thinking Space process between July 2024 and August 2025. Descriptive data on the YP included in the present evaluation is shown in the table below.

*Descriptive Data*

| **Age** | |
|---|---|
| Range | 13 – 16 |
| Median | 15.5 |
| | |
| **Gender** | **Number of YP** |
| Female | 2 |
| Male | 4 |
| | |
| **Setting** | **Number of YP** |
| Secure care | 5 |
| Residential care | 1 |
| | |
| **Number of sessions completed** | |
| Range | 11 – 19 |
| Median | 17 |
| | |
| **CAT stages** | **Median number of sessions to reach stage** |
| Sharing story | 1 |
| Mapping | 4.5 |
| Practicing alternative ways of coping | 11.5 |
| Ending | 18 |

The number of sessions required by each YP varies notably. For example, one young person completed all stages in thirteen sessions, while the longest time to completing was twenty sessions. Most frequently, YP reached the ending stage in eighteen sessions.

The number of sessions it took YP, on average, to reach a given stage also varied widely. Getting to the mapping stage was more uniform across YP, with all reaching this stage within four to six sessions. However, the time to reach the coping stage varied more widely. Some YP got to this stage in less than ten sessions, while others took as many as eighteen sessions to start exploring alternative coping strategies. This highlights how Thinking Space goes at the pace that young people need it to, and therefore it may take longer to reach certain stages of the process than would be expected of traditional CAT therapy. Based on the session logs, it is apparent that some of the young people have a lot coming up for them in their present situation and therefore discussing this can take a lot of time and/or sessions. This means that it might take longer for some to even complete the first stage of sharing about their past. In this sense, the implementation and structure of Thinking Space is more flexible and based on a specific YP's needs, even if that means temporarily veering from the normal structure of CAT.

*Young People Survey*

All six YP included in this evaluation completed an evaluation questionnaire after reaching and spending some time in the coping stage or finishing with Thinking Space completely. Below is a breakdown of all six participants' total scores for each

item, adjusted to a scale of 100. Each item was assigned a theme code based on which of the evaluation's three main outcomes it aimed to measure (understanding self, improved relationships, or alternative ways of coping). Average scores for each theme code are also shown.

| Item | Theme Codes | Adjusted Combined Score (out of 100) |
|---|---|---|
| *Large changes* | | |
| Having a better understanding of one's responses | Understanding self | 80 |
| Having identified positive relationships | Improved relationships | 80 |
| Feeling capable of making positive changes in one's life | Alternative ways of coping | 76.7 |
| Having learned coping skills to use going forward | Alternative ways of coping | 73.3 |
| *Medium changes* | | |
| Able to let go of maladaptive coping strategies or behaviours | Alternative ways of coping | 70 |
| Able to get along with others better | Improved relationships | 70 |
| Having more control over responses to stress | Alternative ways of coping | 66.7 |
| Believing one is able to trust others | Improved relationships | 66.7 |
| Having a better understanding of one's feelings | Understanding self | 66.7 |
| *Slight changes* | | |
| Having developed more effective coping strategies | Alternative ways of coping | 60 |
| Feeling it is okay to tell others how one feels | Improved relationships | 60 |
| Forgiving self for mistakes made in the past | Understanding self | 53.3 |

By Theme Code

| Theme Code | Average Adjusted Combined Score |
|---|---|
| Ability to change behaviours / coping | 69.3 |
| Improved relationships | 69.2 |
| Understanding self | 66.7 |

It is worth noting that for some scale items, there was a large degree of variability between individual YPs ratings. Therefore, each YP's individual rating has been included in forming an understanding of their overall journey and outcomes, which will form the basis of the next portion of the analysis.

*Staff Observations*

Six staff members completed evaluation forms on individual YP following their completion with Thinking Space, one staff member for each YP included in this evaluation. All staff members noted observing multiple improvements in each YP's understanding of themselves, ability to express their feelings, emotional and behavioural regulation, and their relationships with other YP and staff.

<u>Understanding Self</u>

Five out of six staff members indicated that the YP they were providing feedback for exhibited an improved understanding of themselves. This included the YP being more aware of their feelings and triggers, as well as being able to recognise when they are struggling and need support.

<u>Ability to Express Feelings</u>

According to staff, four YP displayed a heightened ability to express their feelings when needed. One staff member further noted that their YP was more confident when discussing their feelings.

> "[YP] was more open about discussing his thoughts and feelings. It was easier for him to recognise when he is struggling." *– Teacher, Secure Care Centre*

Regulation

The majority of staff (five of six) reported that YP showed improved behavioural and/or emotional regulation skills as a result of engaging with Thinking Space. This included being better able to regulate during or after interpersonal conflicts, becoming better at planning behaviours rather than reacting, and managing frustration before it escalates. One staff member even wrote that there had been a reduction in significant incidents involving their YP since that YP had been working with Thinking Space.

> "[YP] appears more calm and planning his thoughts rather than frustration leading to small outbursts. [YP] also appears to be more mature and organised at making decisions that affects his general wellbeing and future progression."
>
> *-Key Worker, Residential Care*

It is worth noting that for one YP, staff indicated that their behaviours improved initially but towards the end of their placement in the secure centre, behaviours escalated again. This indicates that external factors and stress can continue to affect YP's ability to regulate, and the process of improving behavioural regulation is not necessarily linear.

Relationships

Stronger relationships with both other YP and/or staff was indicated as an outcome by all staff. In some cases, YP already had positive relationships with staff and these stayed consistent or throughout their time participating with Thinking Space. For other YP, their relationships with staff become more positive, with some staff noting that YP became more open and able to have productive discussions with staff.

The majority of YP (five of six) also appeared to have stronger relationships with their peers. Staff noticed that YP were engaging more positively with others, showing improved social skills and social awareness, and building deeper friendships with others.

> "[YP] is joining in with the group more and participating in group discussions. He's also going to the gym with peers which he was not previously doing."
>
> *-Teacher, Secure Care Centre*

*YP Journeys*

Each YP's individual "journey" was summarised by categorising the information from the practitioner's session logs into YP's presenting state (re: background, feelings, ways of relating, ways of coping) and their outcomes or changes (re: understanding self, improved relationships, improved coping). The practitioner further provided closing summaries of each YP with their reflection of that YP's overall journey, which was considered in the analysis. Finally, YP's individual self-reported scores on the questionnaire and their written feedback were considered to determine what the most impactful aspects of engaging with Thinking Space were for each individual YP. The general themes for each category are discussed below.

Background

All the YP in this cohort of participants had experienced severe and multiple forms of loss or had other major disruptions in their primary attachment relationships. For instance, half of the YP had experienced death of a close family relationship. Others had difficult relationships with parents, reflecting on being abused, neglected, or lacking affection from parents in

childhood. A couple YP also noted having moved multiple times in their lives, and this creating a sense of loss by not being able to maintain friendships or close relationships with family.

Feelings

Many strong feelings were discussed by YP throughout their sessions. All YP talked about being afraid or having anxiety. For the five YP in secure care, this typically revolved around their situation in the secure centre. These YP discussed being fearful of what could happen to them in the future (i.e., prison, having freedoms taken away as punishment) or of other YP in the centre who were acting violently towards them or others. Nearly all YP also felt isolated, lonely, or rejected by others, either due to their current circumstances and having limited access to friends and family outside of secure care, or due to their own difficulty forming relationships with others. Four out of six YP expressed having a negative view of themselves, holding shame, or feeling worthless. For one YP, this centred mostly around feeling guilt for a previous offence. The majority of YP also mentioned feeling angry or feeling they had been treated unfairly. Of the YP in the secure centre, a few noted that they felt that they were punished more than their peers who behaved in similar ways.

Ways of Relating

All the YP in this cohort had a theme of disconnection running through their social relationships. As discussed, most of the YP had experienced past breakdowns of close relationships or inconsistent relationships, which affected how they related to others in the present. Nearly all YP discussed interpersonal problems with peers, whether that be bullying from others in their current setting or feeling unable to make friends. Some expressed intentionally distancing themselves from others due to how they had been treated, including by carrying defensive weapons in the community and engaging in online forums that encouraged division (ex. “Incel” groups, extremist groups). Several YP came into Thinking Space being distrustful of others and expecting rejection. For example, one YP noted in a session that they were very surprised by how thoughtful others in the secure centre were towards them at Christmas, having expected that no one would consider them at the holidays.

Ways of Coping

Self-harm was the most common coping strategy used by YP at the start, followed by violence towards others (mostly staff / other professionals). A couple YP also discussed coping by using drugs and alcohol. Some YP alluded to rejecting others before they could be rejected as a key driver of how they treated others, in addition to moments of anger and being unable to regulate themselves when feeling heightened.

Outcome: Understanding Self

Over the course of the sessions, all YP in this cohort were able to recognise their past behaviours and why they had exhibited these. In most cases, they were also able to acknowledge the consequences that their behaviours had on themselves and others. YP were able to recognise their triggers and gained a better awareness of their needs. The majority of YP were able to trace this back to their family relationship dynamics to better understand why they have coped in particular ways.

Outcome: Improved Relationships

One consistent outcome regarding relationships was that YP were able to, if nothing else, acknowledge the supportive relationships they *did* have, whether that be with people outside their current environment or with staff. For example, one YP told the practitioner that when she had become extremely distressed, staff had given her the support she needed at the time, and she recognised the impact of this. The same YP had also identified positive relationships in her family and, by session 18, spoke about having more positive relationships with other YP and staff in the secure centre. Another key theme, discussed by a couple of YP, was being able to better understand others and their intentions. They were able to recognise

the role of rupture and repair in relationships and hold more trust that other people would not necessarily leave if there was a conflict.

Outcome: Improved Coping

All YP noted having established and practiced alternative ways of coping through engaging with Thinking Space. For instance, one YP who had mentioned becoming violent when angry, self-harming, and acting in a threatening manner towards others, told the practitioner in session 12 that they were better able to stay calm in situations that would have previously evoked anger, and that they were finding themselves able to let go of coping strategies that were no longer working for them. Other YP similarly noted behaving "better," becoming angry towards others less often, removing themselves from difficult situations, and using techniques learned to self-regulate when needed. Further, one YP who had been self-harming told practitioner that he had used the coping skills learned to reduce his self-harming and avoid negative self-talk, and that this had been effective.

*Practitioner Interview*

Using the CAT-informed Approach

One topic that was explored in the interview with the practitioner was the benefits of using aspects of the CAT modality with YP in secure and residential care. The key benefit of using a CAT-informed approach, as reflected by the practitioner, is the relational and collaborative nature of CAT. The practitioner discussed being able to meet YP where they are and negotiate an understanding of a YP's past and their presenting problems. Through the CAT-informed framework, the YP and practitioner can both share their understanding of a YP's past, their ways of coping, and the connections between the two, with the YP ultimately being the expert of their own story. Further, having less structure than traditional CAT regarding timing and frequency of sessions allows YP the time and space that they need, and means that they only need to engage with the process if and when they are ready.

> "I think the benefits are that it is relational and that you can talk things through and
> it is at their pace. That's definitely a benefit in that way. I think as well, having
> the CAT approach is quite good for both of us, young person and me, being able to map it out because we can see clearly what each other is actually thinking of and the fact that they can actually critique it and say, like, 'no that's not how I meant it.' It gives it that sort of approach where they're actually in charge."

As for Thinking Space's fidelity to traditional CAT, the practitioner shared that she believes Thinking Space is fairly similar to traditional CAT in that the project employs all the core components and stages. For one, the position that endings are inevitable and need to be talked about from the beginning of the process is one that the Thinking Space practitioner also works from. Also, as a CAT practitioner would, she holds an awareness of her own limitations and that YP cannot be "rescued." While Thinking Space is more flexible in terms of how many sessions a YP will have and how long each session is, like CAT it is still time-limited, and for both YP and practitioner there is an acknowledgement that one needs to be okay with an ending that is "good enough." However, one key difference that the practitioner noted between Thinking Space and her CAT-informed training was the idea that a practitioner should not "go in blind" and should know a YP's history before working with them – something that has been adapted when implementing Thinking Space.

> "I think as a sort of CAT-informed approach, like CAT we're still recognising the reciprocal roles, we're still understanding what the impact is, what is the actual things that have occurred for them. Then getting the story and into the reformulation stage, where you're thinking about mapping and moving on to your coping strategies. But also having that follow through of, endings are inevitable.
> You're going to have them throughout your life and we're talking about that
> from the start."

The evaluator asked the practitioner what it was like to use a CAT-informed approach with YP without being fully trained and working as a CAT therapist. Regarding the benefits of this, the practitioner discussed removing barriers for YP as she can "take or leave" aspects of the approach based on their specific needs, and also feels that she is able to work in a more relational and informal way. For example, one YP had written on her feedback form that she liked speaking to the practitioner because she was "good chat" and let the YP braid her hair. The practitioner affirmed that she could have more "fun" conversations with the YP to build a better relationship that then ultimately helps YP along in the CAT process.

Regarding training, the practitioner spoke about having a good base knowledge of CAT through her initial training sessions and ongoing supervision from a therapist. She discussed how useful it was going through part of the CAT approach herself in training – for example, noting that doing her own map allowed her to feel the vulnerability that YP may feel during that process, deepening her understanding of CAT's potential impact. Ongoing supervision from a fully-trained therapist has been helpful for the practitioner by providing a space for her to get support with using a CAT-informed approach in context, as well as talking about things that YP have brought into sessions that have been sad or difficult to hear.

The practitioner did note one challenge that arose due to not being a mental health professional. She felt that she was taken less seriously by YP and staff than she would have if she had the title of therapist or psychologist. She also mentioned that having formal therapist training would have potentially equipped her with more techniques to engage YP at the start of the process when they are initially hesitant to open up.

Implementation of Thinking Space

The evaluator aimed to understand what the barriers and facilitators were to implementing Thinking Space within the secure care setting, and more recently how they contrast with implementing the process in a residential unit. The first theme was about the practice of not sharing records or information with other staff and professionals, unless there is a serious safeguarding concern. A benefit of this, according to the practitioner, is that YP open up more easily and share more information knowing that it will not impact them later. This was echoed in YP feedback forms, with one person writing that Thinking Space was different from speaking to other professionals because "having it off the record is more comfortable." However, this also brought some barriers to implementing Thinking Space, mostly in that staff appeared hesitant at times to engage with the project as they were worried about the content of the sessions remaining fully confidential. The practitioner felt that, based on what she had heard from staff in the secure centre, that they were worried about YP becoming vulnerable following their Thinking Space sessions and staff not being prepared to manage this. However, as the practitioner discussed, she is unable to predict how a session will affect a YP in the hours and days following that session, and although they are learning coping strategies, these take time to practice and internalise. If young people became dysregulated following their session, secure centre staff were likely to attribute this to them having been vulnerable in their Thinking Space session. However, when possible, the practitioner would inform staff if a YP had presented as distressed before, during, or after a session so that the staff could engage with YP accordingly.

With that said, staff were also instrumental in facilitating YP's participation in Thinking Space. Staff put up promotional posters, listened to the practitioner sharing with groups of staff what Thinking Space is, and encouraging YP they had good relationships with to participate in an initial session. The practitioner noted that being able to come in flexibly, as and when suits her and the other YP, was also a key facilitator. This is especially true when the YP have other scheduled activities or workers they need to see.

There were some other barriers that came up simply due to the context of a secure centre, that were not present in the residential unit. For example, in the secure centre, the practitioner is not able to move around freely or spend leisure time with YP to get to know them and build a more trusting relationship.

Outcome Facilitators

In the practitioner's experience with YP thus far, the process of mapping appears to be the most impactful for young people. As she notes, the map serves as a visual representation of their relationships and a framework from which to understand

themselves and explore their coping strategies. She mentioned that YP typically are able to "guess" their own coping strategies after seeing the map and their enacted reciprocal roles, before the practitioner suggests what these may be. YP are further able to use the map to reflect on their current relationships and recognise how these compare with those on the map, providing a deeper understanding of what they need and want in relationships. For instance, one YP reflected that learning that he needs boundaries and consistency in his personal relationships was a key takeaway for him from this process.

While the practitioner shared that she believes this process is most impactful for YP with a significant history of abuse, she also spoke about seeing how the mapping process can be eye-opening even for those who expressed having less stressful childhoods. Even those with seemingly "easy" childhoods tend to uncover relational dynamics in their past that affect their present feelings and behaviour. However, in the practitioner's opinion, the maps have more explanatory power for YP with more adverse experiences stemming from early attachment relationships, as well as those who struggle with self-harming and low self-esteem.

The practitioner also spoke about how she can provide YP a way to experience relationships differently through the relational aspect of the work. She discussed one YP with which she had a rupture and repair with towards the beginning of their process, and that after their repair her and this YP have had a "great relationship."

> "A rupture and repair relationship with me as a practitioner gives them that space to actually go 'right, okay, people won't just leave … it can be something positive, I can repair my relationships pretty easily' … So I think building up that sort of resilience, getting more trusting, not necessarily trusting in the way of trusting everybody, but being able to actually make judgements appropriately."

Something that the practitioner had noticed with several YP she has worked with so far is that after going through the process, they are better able to understand the behaviours and intentions of others, often becoming more empathetic. From her perspective, after participating in Thinking Space, YP can better separate themselves from someone else's actions, acknowledging that everyone has their own "map" – their own pasts, needs, and coping strategies – and that another person's behaviour is often more about themselves than anyone it is targeted towards. The practitioner believes that this aspect has allowed YP who engaged in Thinking Space to approach their relationships differently and change how they communicate with others, leading to more positive social relationships.

**Discussion**

Although further evaluation with more young people who take part in Thinking Space is needed to fully understand its impact, as well as its potential for improving long-term outcomes for young people in secure care or at risk of becoming in conflict with the law, this initial evaluation suggests that Thinking Space is equipped to support young people to achieve its aims. Based on young people's own feedback and information provided by the practitioner, Thinking Space has enabled all the young people included in this first evaluation to gain a better understanding of themselves and how their past experiences contribute to their present thoughts, feelings, and behaviours. This group of young people have also reported success in applying their new coping strategies and/or being able to let go of coping strategies that are no longer working for them. While the process of establishing and maintaining new, more productive ways of coping is often not linear – and the time-limited nature of the CAT-informed process does not allow for long-term practice of coping skills with a practitioner – young people nonetheless have taken an understanding of themselves and effective ways to regulate that they can work to continue to apply on their own.

Based on session logs and the practitioner interview, young people's ability to make sense of their pasts and understand their feelings and behaviours was a key positive outcome for this cohort of young people. However, "understanding self" was the theme code with the lowest self-reported score, about 2.5 points below the other codes of "ability to change behaviours / coping" and "improved relationships." While this is a slight difference, it is worth noting that the consistently lowest-scored item, "I forgive myself for mistakes I've made in the past," fell under this theme code. The rationale for

grouping this item within "understanding self" was that, if young people can recognise the impact that their past has had on how they feel and behave, then theoretically, they should be able to show themselves more compassion for how they have coped previously. A core tenant of CAT is the idea that "you were not the problem, but you can be the solution." In working from this perspective, the goal is that young people will be able to forgive themselves for their past behaviours, typically the ones that have caused them to enter secure care in the first place, and focus on making better choices moving forward. However, this is a big task, and likely one of the outcomes that will take weeks, months, or years after a young person's engagement with Thinking Space to materialise. Some young people may have trouble forgiving themselves for their past offences depending on their severity, or as the practitioner discussed in interview, going through the CAT process may deepen a YP's empathy for others, temporarily resulting in increased guilt surrounding any past harms done to others. Further, as Lim & DeSteno (2023) found, having past experiences of adversity is associated with greater empathy for others, which is mediated by feelings of guilt. In their study, participants with higher levels of past adversity felt more guilt when harming another participant than those with less adverse experiences. One explanation was that those with adverse experiences felt more compassion for the victim, having had more personal experiences of victimisation. As the Thinking Space practitioner reflected, YP completing their map helps them see how their past relationships and reciprocal roles have affected them, potentially heightening their sense of being victimised by others. YP are then often able to acknowledge that everyone has their own "map," which may result in enhanced compassion for others.

Another notable outcome reported in this evaluation was improvement of young people's interpersonal relationships. Several young people were able to either identify positive relationships that they already had or felt that their increased understanding of others and enhanced ability to regulate their own responses meant that they were able to form more positive relationships with peers and staff. Stronger relationships and improved social skills and awareness was also an outcome recognised by the majority of staff working with young people. Not only does this lead to a better experience for the people around the young person, but it allows young people to feel more supported and secure in their environment.

It appears that Thinking Space is a feasible intervention to be implemented in both secure care and residential care settings, although a formal feasibility analysis is yet to be conducted. There is a low barrier to entry for young people, as they can engage as and when they want to, and they can share personal information knowing it will not be shared with other workers, so it is less likely to impact them down the line. Further, as Thinking Space is an independent project and is not held to the same commitments as secure care or residential care settings, it can be implemented with more ease and less resources, while keeping the interests of the young people at the forefront.

Some barriers to young people participating with Thinking Space were identified and the project will continue to be adjusted to remove these. For one, in terms of recruitment, not speaking to young people individually to tell them about Thinking Space was observed by the practitioner to be a barrier, as young people may not want their peers to know that they are participating in the project. Therefore, moving forward, more effort will be made to engage young people on a one-to-one basis at the start. Another barrier appeared to be some staff's hesitancy to support Thinking Space due to concerns about not sharing information and the potential for young people to become dysregulated following their sessions and this needing to be managed by staff. As a response to this, the practitioner has been informing staff if a young person presents as distressed during or after a session, without sharing details of what was discussed, so that staff know to give the young person extra space to regulate.

Getting direct feedback from young people was also a challenge, at times. While YP were generally willing to complete the scaled questions on the closing form, not much qualitative feedback was able to be gained from this, as YP either did not complete open-ended questions or gave very minimal answers. This made it more difficult to ascertain the strengths and limitations of the process from young people's perspective. One barrier may have been literacy issues among young people, although this is not certain. However, other methods of gaining feedback will be made available for YP to prepare future evaluations, such as interviews or audio-based surveys.

Future evaluations of Thinking Space should aim to better understand how a young person's participation in the project impacts on their lives overall. This may include more detailed staff feedback on any changes they have observed in how a particular young person presents in their environment outside of the sessions. Additionally, future analysis should aim to

understand the similarities and differences in both the process and outcomes depending on the context Thinking Space is delivered in (secure care vs. residential care). Finally, as the project continues to be delivered over time and more young people finish the process, follow-up feedback will allow for analysis of the potential long-term impacts of Thinking Space.

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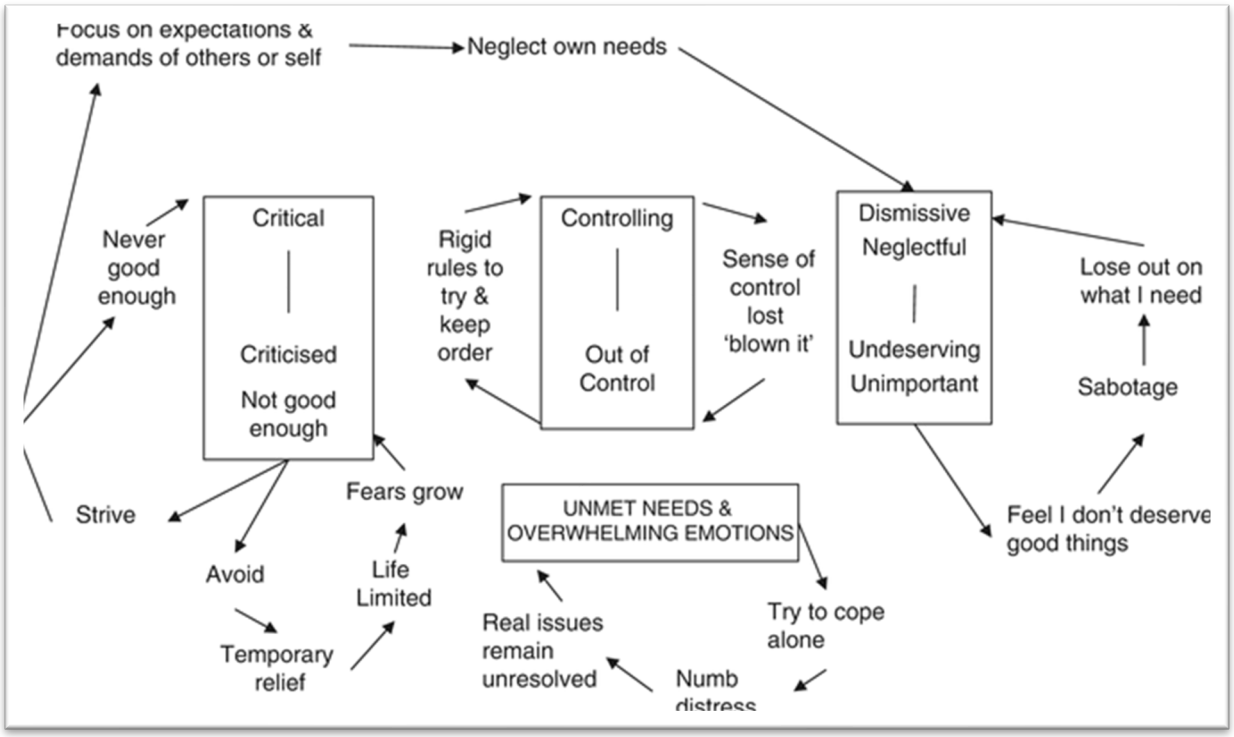
## Appendix

1. Sample CAT Map

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2. YP Evaluation Form

**Please tell us how much you agree with the following statements, with 1 being not at all, and 5 being completely agree.**

***Compared to before starting the sessions, I now feel ...***

| | | | | | |
|---|---|---|---|---|---|
| I have a better understanding of why I *feel* the way I do | 1 | 2 | 3 | 4 | 5 |
| I have a better understanding of why I *respond* the way I do in situations | 1 | 2 | 3 | 4 | 5 |
| I forgive myself for mistakes I have made in the past | 1 | 2 | 3 | 4 | 5 |
| I have developed more effective coping strategies | 1 | 2 | 3 | 4 | 5 |
| I can let go of coping skills I learned in childhood that no longer help me | 1 | 2 | 3 | 4 | 5 |
| I have more control over how I respond to stressful situations | 1 | 2 | 3 | 4 | 5 |
| I get along with people better | 1 | 2 | 3 | 4 | 5 |
| It is okay to tell people how I feel | 1 | 2 | 3 | 4 | 5 |
| I have identified positive relationships in my life | 1 | 2 | 3 | 4 | 5 |
| Generally, other people can be trusted | 1 | 2 | 3 | 4 | 5 |
| I have learned skills that I will use going forward | 1 | 2 | 3 | 4 | 5 |
| I am capable of making positive changes in my life | 1 | 2 | 3 | 4 | 5 |

1. **Overall, did you enjoy coming to these sessions? Why or why not? Is there anything that could be improved?**

2. **How was this different from any mental health or wellbeing sessions you have had before? Or, how was this different from speaking with other professionals about your life?**

3. **What were the most important things you learned from these sessions? This can be new skills or ways of thinking, or anything you learned about yourself (that you want to share).**

4. **Have you noticed any changes in how your feel or behave?**

5. **Do you think your work in these sessions will help your relationships with others? How?**

6. **Was there anything that made it difficult to take part in the sessions?**

3. Staff Evaluation Form

## Observed Changes in Young Person

From your perspective, please describe any changes you have noticed in this young person in the below areas that you believe were a direct result of their participation in Thinking Space.

**Emotional Wellbeing:**

**Self-Awareness:**

**Behaviour:**

**Relationships with other young people:**

**Relationships with staff:**