Implementing Acceptance and Commitment Therapy and Check-In/Check-Out With a Struggling Learner: A Case Report

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The authors present a case report for an adolescent student with a learning disability who has academic, behavioral, and intensive mental health needs. A therapeutic package to support and maintain student progress is discussed. The case report outlines specifically how the student's mental health needs were supported through the implementation of Acceptance Commitment Therapy and a Check-In, Check-Out procedure. The authors discuss how the interventions are applied to the student's academic engagement, emotional stability, and improved quality of life. Major takeaways and implications for school teams are discussed.

Keywords: acceptance commitment therapy, check-in, check-out, learning disability, mental health, suicide

Introduction

Youth Suicide and Parasuicide

Suicide among adolescents and young adults has become an increasing-ly prevalent concern. The Centers for Disease Control and Prevention reports an overall increase in youth suicide and suicide attempts over the past 10 years, with an estimated one out of every five adolescents seriously considering suicide every year (CDC, 2019). Parasuicide, defined as an apparently suicidal or self-harming gesture when the intent is not death (Sampoornam, 2020), is considered a risk factor for later suicide (Sanderson et al., 2020). Considering this, and the sobering statistics around suicide rates, many policymakers and service providers have called for improved strategies and programs to support the health of young people. Accordingly, we outline below a case report detailing a therapeutic package for a young adult who struggled with parasuicide and suicidal ideation and had a history of trauma. In the following sections we introduce the pertinent literature related to the elements of treatment for this student, provide an in-depth description of the student and his case, detail how the intervention elements were implemented, and finally make suggestions for similar practice.

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Learning Disabilities

Learning disabilities (LD) are generally understood as significant learning struggles that are caused by neurobiological factors. Students with LD often face significant difficulties in mastering academic content across one or more subject or skill areas. The Individuals with Disabilities Education Act (IDEA, 2004) defines a specific learning disability more categorically as "a disorder in one or more of the basic psychological processes involved in understanding or in using language...that may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations." Students with LD require implementation of high-quality, evidence-based instructional strategies often including explicit modeling and reteaching of new skills (Shanahan, 2023), use of visual aids and supports, as well as individualized classroom accommodations to ensure access to instruction (Gandhi et al., 2018). Additionally, students with LD can often also present with mental health and/or behavioral needs that require additional therapy or intervention (Margolis et al., 2023). When these needs are significantly compounded by certain life stressors, support for students with LD can necessitate more intensive and individualized therapy.

Relevant Theories of (Para) suicide Treatment

Although it is difficult to reliably determine an individual's risk for suicide or suicidal gestures, current understanding acknowledges the impact of both individual and contextual level factors on mental health. Key theories of suicide risk describe how individuals whose need to belong is not met and who feel as if they are a burden on others in their life may be more likely to engage in suicidal ideation (interpersonal theory; Stewart et al., 2017) and that adolescents who have a lower tolerance for psychological pain such as guilt, shame, and hopelessness, are at increased risk for suicidality (Becker et al., 2019; Mento et al., 2020). Common risk factors for suicidality include mental illness, substance abuse, life stressors, social situations, suicidal ideation, and intensity of parasuicide gestures (Sanderson et al., 2020). Trauma, particularly abuse and neglect, is one life/situational stressor that has been shown to increase adolescent risk for (para)suicide (Murray et al., 2021) indicating the importance of attending to this factor when supporting children in treatment.

Trauma-Informed Applied Behavior Analysis

Trauma-informed care (TIC) refers to practices, across disciplines, that recognize the impact that traumatic experiences (e.g., abuse, neglect, natural disasters, family violence, bullying) have on individual functioning, and which seek to help individuals integrate these experiences so that they can engage in healthy and productive behaviors to promote mental health. TIC includes treatments that are characterized by feelings of acceptance, trust, safety, and empowerment (Knight, 2019). Recent treatment and practitioner research has recognized the importance of integrating TIC strategies and understanding with

other therapies and approaches to supporting children, especially in schools (Parameswaran et al., 2023). This includes trauma-informed applied behavior analysis (ABA) practice, which seeks to incorporate TIC ideas into behavioral approaches for supporting students. While "traditional" ABA understanding has only minimally acknowledged the impact of trauma, the trauma-informed ABA framework asserts that aspects of best practice in TIC such as promoting client choice, ensuring trust in the client-practitioner relationship, and focusing on the development of proactive life/coping skills can align effectively with behaviorally based interventions (see Rajaraman et al., 2022 for more details).

One effective behavioral intervention that incorporates elements of ABA, mindfulness, and Relational Frame Theory (RFT) is Acceptance and Commitment Therapy (ACT). RFT and ACT co-evolved and both ideologies are concerned with the changing the context of how one relates to thoughts and emotions (Hayes, 2016). In addition, ACT integrates the use of metaphor from RFT. In practice, metaphors are used in part to create changes between one's sense of self and their behaviors (Hayes, 2016). As a result, the use of metaphors by therapists is common to the practice of ACT.

Acceptance and Commitment Therapy

ACT is part of the third wave of behavioral therapy (Sandoz et al., 2019). In this approach, strategies to modify and control the content of one's thoughts are replaced with creating more awareness and acceptance of those thoughts. The aim of ACT is not to change the frequency of unwanted private events, but to modify avoidance strategies and teach the person to align their thoughts with their values and be committed to the values through action (Luciano, et. al., 2012). As a result, there is a reduction of the power of unwanted thoughts on the individual. An important element of ACT is the sensitivity to the environment's influence on the function of an individual's behavior, both public actions and private thoughts (Hayes, 2016).

For example, an ACT therapist acknowledges that humans encounter pain, trauma, and loss through interactions with their environment. These experiences are part of life, and that resulting suffering arises through a history of an unhelpful persistent use of strategies to eliminate unwanted thoughts. A client may feel stuck because these strategies have maintained or made the problem worse. This state of "being stuck" is called psychological inflexibility (Hayes, 2016). Thus, the focus during ACT sessions is to not fix the client's thinking but to get them to manage or minimize the pain caused from weak, ineffective attempts to control their thought processes (Harris, 2019).

Extant research has demonstrated that ACT can be an effective intervention for improving the well-being of individuals with neurodevelopmental disorders, including LD (Garcia et al., 2022). It has been used in prior studies

to help improve the mental health of students with LD (Nemati et al., 2022; Rostami et al., 2014). Furthermore, while there is not yet enough evidence to claim definitively that combining ACT with other behavior-based interventions increases prosocial behaviors, researchers have suggested that doing so could help to augment and sustain positive outcomes for clients (Garcia et al., 2022). Check-In, Check-Out is one such behavioral intervention.

Check-In, Check-Out

Researchers typically characterize Check-In, Check-Out (CICO) as a tier 2 targeted intervention for students who exhibit some problem behavior in the schools (Crone et al., 2010). It is considered an effective intervention overall for supporting appropriate school behaviors and decreasing disruptive behaviors (Drevon et al., 2019). During the CICO intervention, a student is paired with a trusted mentor teacher/staff in the school building. The student checks in at the start of each school day, mid-day, and at the end of the day to determine how well the student is meeting school expectations or personal goals. Progress is collected on a data sheet and reinforcement, encouragement, and feedback is provided if a predetermined goal on the behavior is met. Features of CICO can be altered or intensified via the inclusion of conversations and elements designed to support youth with trauma. In particular, the typical CICO structure can be slightly modified to align with the core elements of TIC - trustworthiness, felt-safety, choice, collaboration, and empowerment (see Hackney et al., 2023). These adaptations are particularly helpful for students with intense feelings and flashbacks (Cavanaugh, 2016, Swoszowski & Rollins, 2019).

CASE HISTORY

Psychological Background

This research was approved by the appropriate human subjects protection agency from the university of the authors. Assent was also provided by the student. Therefore, the authors have permission to report the student's diagnostic information and written case notes.

Jimmy (pseudonym) has a diagnosis of Specific Learning Disability (SLD). He also qualified for special education services on 5/1/2015 under the disability category of speech or language impairment. He is an 18-year-old White male in 12th grade who receives his daily instruction in a Social Communication Classroom (SCC). Previous behavioral and mental health interventions consisted of visual prompts (i.e., body scan map and/or Zones of Regulation chart), and problem solving and processing protentional demanding situations that could take place in the community. In addition, Jimmy had a great deal of experience with mental health services. In the past he saw a therapist once a week and another therapist twice a week for mental health services. At the time of this writing, he saw a psychiatrist, an outside district therapist once a week,

the district social worker occasionally, and met once a week for 40 minutes with the first author. He also received 80 minutes a week of Speech and Language Therapy.

Jimmy took the medications Latuda for depression and Lexapro for anxiety. He had experienced multiple episodes of sexual abuse by his mother and his brother. His mother was incarcerated, and his brother was placed in a residential care facility. Jimmy lived with his father (now divorced from his mother) who was supportive and nurturing toward Jimmy as evidenced in notes from Jimmy's previous Individualized Education Program (IEP) meetings.

To gauge the extent of Jimmy's trauma, the therapist used the Adverse Childhood Experiences Questionnaire (ACE-Q; Zarse, 2019). The questionnaire is a 10-item scale used to correlate childhood maltreatment and adverse rearing contexts with adult health outcomes. Individualized Education Program (IEP) Jimmy responded "yes" to five items on the questionnaire, resulting in an ACE score of five. He experienced humiliation and abuse from his mother and brother, his parents were separated, and his mother was incarcerated. For therapeutic reasons the therapist did not share the results of the questionnaire with Jimmy.

The therapist was aware of research that indicated that student behavior and learning are affected by exposure to trauma. For example, students cannot concentrate on their schoolwork when they lack a sense of safety and security. As a result, they are anxious, fearful, and unknowingly suppress their traumatic memories. In terms of learning, children who have experienced trauma have decreased IQ and reading ability, lower GPA, poorer school performance, and more days of school absence (Kuban & Steele, 2011). As a result of this background information, the therapist hypothesized that Jimmy may not have a learning disability as indicated on his Evaluation Team Report (ETR) but, his trauma masked his academic ability.

Academics

According to the Evaluation Team Report (ETR) reviewed on August 30th of 2017, Jimmy's Wechsler Intelligence Scale for Children-Fourth Edition (WISC-IV) Full-Scale IQ fell in the low average range. WISC-IV (updated version is the WISC-V) is a commonly used measure of intellectual ability that has been shown to have acceptable psychometric qualities for the purpose of assessing overall IQ (Sadeghi et al., 2011). Additionally, his basic reading, math reasoning, reading comprehension, spelling, and written expression skills all fell within the low average range according to norm-referenced assessments. Jimmy was found eligible for special education services under the category of specific learning disability using the specific state-based eligibility criteria established for this educational disability category. The state's eligibility criteria align with the IDEA's definition of specific learning disability presented above.

Table 1. Jimmy's WISC-IV Scores

Scale	Score
Verbal Comprehension	= 87 (low average)
Perceptual Reasoning	= 86 (low average)
Working Memory Index	= 83 (low average)
Processing Speed Index	= 86 (low average)
Full Scale IQ	= 81 (low average)

According to the state Measure of Progress (MAP) testing, a normed universal screening assessment of academic skills, Jimmy's reading skills were commensurate with a 4th grade level and his math skills fell at a 5th grade level. He was given an Oral and Written Language Scales-2nd Edition (OWLS-2) test to assess his receptive and expressive language skills. The OWLS-2 has been shown to have acceptable reliability and validity for differentiating between individuals with language disorders and those who do not (Carrow-Woolfolk, 2011). The OWLS-2 is standardized with a mean of a 100 with a standard deviation of +/-15. Therefore, all scores between 85-115 are considered within the average range. His receptive language standard score was 90 with a percentile rank of 25 and his expressive language standard score was 78 with a percentile rank of 8.

Strengths and Difficulties Questionnaire

The Strengths and Difficulties Questionnaire (SDQ) was given to Jimmy. The SDQ is a brief behavioral screening questionnaire for 4–17-year-olds. His scores for all subscales on this questionnaire are presented in Table 2. Scores for Jimmy indicated "very high" concerns in five out of six domains. It is interesting to note that his prosocial scale score was also "very high". Jimmy liked being around his peers and teachers.

Table 2. Jimmy's Scores on the Strengths and Difficulties Questionnaire

Scale	Score	Descriptor
Emotional Problems	10	Very High
Conduct Problems	8	Very High
Hyperactivity Scale	6	Slightly Raised
Peer Problems scale	6	Very High
Prosocial Scale	10	Very High
Impact Score	4	Very High

Speech and Language Services

Jimmy received 80 minutes a week of Speech and Language Therapy. He has received speech and language services since elementary school, and worked on articulation of speech sounds as well as language structure and meaning. In his final year of speech therapy, Jimmy worked on retelling stories with two episodes (attempts to solve problem, consequences, and character's reaction) elaborating and giving details to answer about character components to advance the story with moderate support (i.e., prompting questions, visual supports, rereads). According to his IEP, the speech and language therapist recommended that Jimmy continue to focus on future planning and other executive function skills.

CASE STUDY

Jimmy was referred for mental health services by his teacher in September of 2020 after he cut himself with a piece of glass and metal found outside the school. The wound was cleaned and bandaged, and Jimmy was sent home early. The teacher was in her third year of teaching. She had taken a classroom management class with the first author and graduated from a special education teacher preparation program in May of 2016. Therefore, rapport and familiarity had already been established with the teacher and the first author. Her concerns included Jimmy's past trauma of sexual abuse and his anxiety and depression. As a result of these problems Jimmy had difficulty regulating his emotions, being on-task, focusing, and completing his work. Frequently, he would get frustrated during instruction or independent work. He could get defiant, become intermittently angry for no apparent reason, and withdraw from others. The latter set of behaviors are not uncommon for someone who has experienced trauma.

ACT Training

The therapist's training in ACT consisted of successful completion of a 12 hour on-demand course with a one day live follow up training. He also attended several one to two hour trainings by various presenters. The therapist had implemented ACT with several students before implementing the approach with Jimmy.

Initial Sessions

Building Rapport

The first two months of sessions consisted of building rapport and trust with Jimmy. Jimmy was open to work with the therapist because of his previous and current positive experiences with mental health therapists. For example, Jimmy played chess with his previous therapists and so the first sessions consisted of the therapist and Jimmy watching chess videos on YouTube, and the therapist teaching Jimmy some specific chess strategies. The therapist utilized traditional talk therapy and listened to Jimmy's concerns about friends and his

part time job as well as discuss the video games Jimmy played. Jimmy mentioned his abuse a few times but when the therapist asked questions Jimmy did not want to talk about his trauma. He continued to build rapport by having Jimmy create a list of his strengths and values which consisted of, being bright and working hard for good grades, being social with friends and staff, that he preferred to be busy, enjoyed playing chess and that he wanted to graduate, get a job, and earn money. Therapy sessions continued in the same format until the following semester.

(Para)Suicide Incident

In February of 2021, a lead teacher (a mentor to other teachers) found Jimmy in a bathroom stall trying to hang himself by his belt. The staff member brought Jimmy into a safe space (her office). She called the therapist into the office to talk to Jimmy while the ambulance came to transport Jimmy to the hospital. Jimmy wanted to talk with the therapist. During the conversation the therapist learned that Jimmy's brother (one of his perpetrators) was going to visit him soon for the first time in years. Jimmy was emotionally overwhelmed and did not know how to manage his emotions. The therapist concluded that the scheduled visit retraumatized Jimmy's unprocessed emotions around the original traumatic event of abuse.

The therapist assessed Jimmy's condition and determined he was in a state of cognitive fusion. When a person is "fused" they tend to experience their thoughts and beliefs as literal or true. In this case Jimmy believed the thought that "I don't deserve to live" to be true and that the statement was an accurate reflection of his self-worth. During the next 30 minutes the therapist implemented a defusion technique sequence that is represented in Figure 1.

Task Analysis for Jimmy's Unwanted thoughts and



1. Sit in a chair like you are watching T.V.



2. Witness/observe images and thoughts in your mind like watching T.V.



- 3. Describe what you see. What you see is not good or bad.
- 4. Describe the person you see in your mind. What are they wearing? Describe their,
 - a. Shoes



b. Pants



c. Shirt



d. Hair



- 5. Now, turn everything you see into black and white, no color images.
- 6. Now erase everything you see ...
 - a. Shoes
 - b. Pants
 - c. Shirt
 - d. Hair
- 7. Now nothing is left except for a pile of ash



8. Now journal or do another relaxing and calming activity until you are ready to move on.



9. You did it!



Figure 1. Task Analysis of Jimmy's Defusion Technique

The purpose of using defusion is to alter the impact of one's thoughts on behavior (Harris, 2019). During defusion the therapist suggests to the client to change how they interact with thoughts by *noticing*, *naming*, and *neutralizing* thoughts. For example, in Jimmy's case, rather than his thought being perceived as an accurate truth and forcing him toward self-harm, he could say, "I am noticing that I am having the thought that I don't deserve to live."

In addition to the defusion technique the therapist suggested a *connect and reflect* exercise for Jimmy. It was a simple exercise to help him to connect with his values and relationships. Jimmy indicated to the therapist that he felt connected when he was playing video games online with his friends. The therapist suggested that Jimmy sit in his chair and recall a positive memory of playing video games with his friends. He asked Jimmy to observe his thoughts and feelings and relive the moment of playing video games. Once Jimmy's body appeared calm, the therapist suggested to picture his unwanted thoughts and images as if they were on a tv. Jimmy described what he saw (his mother and his brother) and what they were wearing from the bottom to the top of their body (i.e., shoes to hair). Next, Jimmy was encouraged to change the images to black and white, then alter them into ashes. Finally at Jimmy's request he wanted to journal about the process and his thoughts and feelings at home and at school. The ambulance arrived and Jimmy was taken to the hospital for an evaluation. He returned to school five days later.

Sessions After the Incident

During Jimmy's first session back, the therapist asked about his hospital stay and received more information about the upcoming visit from his brother. For the next several sessions they collaboratively listed where Jimmy got "retraumatized" and what led to his re-traumatization. Jimmy indicated he would get "retraumatized" when he saw or heard students being put in holds/restraints, saw sharp objects, and when students disrobed. Jimmy would ruminate about his past trauma and said he could not control his thoughts and he would get frustrated and re-experience his trauma.

Jimmy experienced images of trauma during sleep. One disturbing image was a smiley face that he had experienced in his dream. When he drew the smiley face during therapy, it was like an emoji (③) only bigger, yellow in color and on a table. Jimmy indicated that he was fearful of the image. The therapist understood that maltreated children can misread facial cues and that perpetrators often smile before they perform an abusive act (Koizumi, & Takagishi, 2014). They spent the session processing the dream and particularly the smiley face. The ACT technique of defusion (like rescripting) was used to separate the negative feelings associated with the smiley face. The therapist indicated that the dream image could not harm him. Jimmy agreed and was open to having a new perspective to the dream image. The therapist offered a dream interpretation

that good things will come to Jimmy because graduation was nearing and so he will begin to start earning money at a job (act on his values/committed action). Jimmy accepted this interpretation and felt relieved.

Creative Hopelessness

Creative hopelessness (CH) is an optional part of the ACT model. It is used when the therapist suspects or knows a client is clinging tightly to strategies, they have been using that no longer work. The aim of CH is to create a sense of hopelessness in pursuing the "old" agenda. As a result, the client's energy is now used to acknowledge, identify, and allow difficult thoughts and feelings as opposed to suppressing or avoiding them. The concept of hopelessness is not about one's life, or one's future – but hopelessness in pursuing the "old" agenda. During the work of creative helplessness there were several thoughts, feelings, emotions, and sensations that Jimmy avoided or tried to get rid of. He wanted to get rid of anxiety, sadness, anger, guilt, shame, feeling unworthy, and especially traumatic memories. Instead, the therapist and Jimmy discussed various ways he distracted himself from the pain (i.e., playing video games, acting out). Jimmy also noticed that he tried avoiding certain situations, withdrawing from peers and staff at school. He understood that these strategies provided short term relief but were not long term solutions.

Team-based Approach

The therapist had a positive relationship with the school behavior team. He was frequently called to consult with the team on behavioral issues with students not on his caseload. He felt that Jimmy could benefit from a team intervention that consisted of a daily routine of feedback on behavior, emotions, and increased positive adult attention. He suggested to the school behavior team that the CICO intervention could be beneficial for Jimmy. During CICO, Jimmy could check in with school staff at the start of each school day, mid-day, and at the end of the day to determine how he met school expectations or personal goals. Progress could be collected on a data sheet and reinforcement, encouragement, and feedback provided if a predetermined goal on the behavior is met (Kern et al., 2019).

The team met for one hour and developed a trauma-informed therapeutic package to address both his mental health and behavioral needs. A folder was created which consisted of a feelings wheel to identify feelings, defusion techniques, check in questions about his feelings, how his day was going, if he anticipated any difficulties, and if he needed help. Jimmy checked in three times a day with three preferred school staff. At any point that he felt an intense emotion he would let his teacher know and he would use a present moment strategy of "anchoring" his body and do a calming routine such as walk on a treadmill or draw.

DISCUSSION AND IMPLICATIONS FOR PRACTICE

Outcomes for Jimmy indicated that the combination of trauma-informed behavioral strategies, ACT and CICO procedures resulted in Jimmy's improved ability to interdependently process the traumatic distress as well as implement effective strategies to foster and sustain emotional regulation. These skills ultimately enabled him to achieve personal goals and take actions that aligned with these goals and values. While generalizations to large-scale practice cannot be made from one case study, Jimmy's supports and outcomes highlight some key take-aways.

Trauma-Informed Intervention Package

A key element of Jimmy's school supports was the implementation of a package of trauma-informed interventions. ACT helped Jimmy to accept his emotions, process them effectively, and refrain from maladaptive avoidance behaviors. Many of the suggested trauma-informed additions/alterations to the CICO system outlined by current research (Hackney et al., 2023) and elements of evidence-based trauma-informed care (Substance Abuse and Mental Health Services Administration, 2014) were incorporated in the CICO system for Jimmy. These included opportunities for Jimmy to feel empowered and in-control of his environment via choice of when and how he needed to use his learned strategies, predictability in his schedule, and collaboration with staff members to address difficult times of the day or emotions. In addition, staff members used check-ins throughout the day to build trusting relationships with Jimmy via respectful, supportive, and encouraging conversations about his goals and progress. The way in which these key strategies were conceptualized for Jimmy's case is represented in Figure 2.

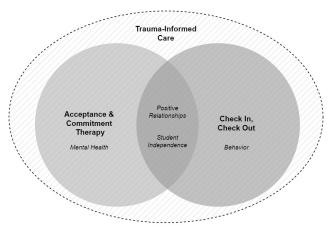


Figure 2. Conceptual Diagram of Jimmy's Interventions

(Para)suicide

As a student with trauma from prior abuse, Jimmy was at increased risk for suicidal ideation and (para)suicide (Murray et al., 2021). A recurring theme for Jimmy associated with this trauma was his experience with "flashbacks." The term "flashback" in therapy, is used to describe memories that are intense because of traumatic events. The events are experienced as being relived in the moment and not as a past memory. In ACT the goal is not to distract from the flashback or make the flashback disappear but to notice that in addition to the painful memory there is more to notice in the present moment such as the objects or people in the environment (Harris, 2019). Throughout the day, Jimmy had the opportunity to check in with his preferred teachers and staff on how he was feeling. If he was beginning to feel overwhelmed by his feelings he could walk around the building, stretch, breathe differently, run on the treadmill, or drink water. The goal was not to get rid of the intense memories and emotions but rather, acknowledge, identify, and allow them into his awareness while he was doing his daily activities.

Extreme trauma-related fusion can reduce a person to being speechless and incapable of talking about their experience (Harris, 2019). The CICO intervention helped Jimmy particularly when he had "freeze" responses, was overwhelmed, and fused by a traumatic memory. According to a teacher interview Jimmy reduced the frequency of times he did not want to talk about his feelings from twice a day to zero times a day and was now able to proactively share how he was feeling . Furthermore, the therapist checked the implementation of the CICO folder twice a week. Jimmy and the staff utilized the folder three times a day with 100% adherence. These results give some indication that Jimmy (and staff) enjoyed the acceptability of treatment goals, procedures, and outcomes.

Receiving daily adult feedback, indicate that Jimmy may have enjoyed teacher attention (Weber et al., 2019). However, the purpose of the CICO procedure was to address behavioral and mental health needs (i.e., a feelings wheel to identify feelings, defusion techniques etc.). Therefore, Jimmy may have also preferred the CICO procedure because the staff helped him regulate his emotions. Jimmy shared with the therapist near the end of the school year that regulating emotions was a goal he had since beginning therapy in his early teens. He also shared that he felt confident in his ability to regulate his emotions.

In terms of self-harm, the CICO strategy helped Jimmy reduce self-harming behaviors. School staff believed that having a routine with a support team allowed him to share feelings daily which helped maintain and generalize the ACT strategies he learned in therapy. The result of the intervention package was that Jimmy had zero self-harming behaviors for the rest of the year. He graduated and was able to obtain a job and earn money, which was in alignment with his values.

Act and Trauma

Further exploration into the self-harming incident illustrates that the dropping the anchor intervention can be an effective intervention to start with when working with students who are extremely fused with their negative thoughts. This allows students to anchor their body to the present to facilitate further processing. Thus, after the first initial self-harm incident Jimmy was able to "drop an anchor," sit in the chair, and then do the defusion technique. Only then was Jimmy able to notice and name his self-harmful thoughts and feelings. This intervention can be helpful for practitioners working with students who are similarly dealing with a high level of fusion and who have struggled to consistently implement coping/regulatory strategies when feeling overwhelmed by distressing thoughts or flashbacks as is often the case for adolescents dealing with suicide ideation (Mento et al., 2020).

Creative helplessness was another key tool in supporting Jimmy's productive behaviors. As an element of ACT, this step helps clients identify the futility of directing energy toward controlling or avoiding their thoughts and redirect their efforts toward constructive strategies (Hill, 2021). Jimmy was guided in accepting that certain activities or actions helped him to avoid uncomfortable feelings for the short term, but that they weren't beneficial long-term for maximizing his happiness. He was then able to think creatively about strategies that could help him to thrive. This process of giving up the "agenda of emotional control" can be helpful for students dealing with similar overwhelming emotions and who have established behavioral repertories that contradict their goals and values.

Trauma and the Impact on Learning

Past traumatic experiences considerably contribute to low academic performance and poor social skills as well as increased risk for mental health concerns (CDC, 2019; Porche, et al., 2011). Youth who have been exposed to violence and toxic stress because of traumatic experiences tend to have lower scores on traditional assessments of intelligence and academic skills (Delany-Black et al., 2002), Jimmy had experienced multiple ACEs which impacted his emotional regulation skills and feelings of connection and safety with others. Prior research has demonstrated that ACEs and their accompanying stress can harm the developing brain of children and result in learning, attention, and behavioral deficits in the classroom (Jimenez et al., 2016; Shonkoff et al., 2012). Furthermore, the toxic stress created from ongoing trauma can alter the structure of developing brains and their related functions (Carrion & Wong, 2012).

Based on these previous trauma studies, a hypothesis could be made that some of Jimmy's learning difficulties arose because of the effects of his past traumatic experiences. It is possible that the "flashbacks" distracted him from focusing on and learning the material at a rate comparable to his typical achieving peers. Additionally, when confronted with difficult experiences and emotions during his school day, Jimmy's struggled with coping skills which resulted in missed instruction. It could be further hypothesized that this missed academic instruction was compounded by Jimmy's feelings of disengagement and detachment from adults in the educational setting as is common for students with trauma (Cole et al., 2005) resulting in less constructive and fruitful instructional interactions with educators. The hypothesis was supported from data collected from the school's behavior support team which indicated that Jimmy had a reduction in school absenteeism of 9 days pre intervention to 5 days post intervention. In addition, the length of academic engaged time increased from 10 minute to 25 minute sessions.

IMPLICATIONS FOR PRACTICE

School staff charged with instructing students with trauma can misinterpret student behaviors and coping strategies in the classroom, which can lead to counterproductive or harmful adult responses. These responses can serve to further alienate or retraumatize students (Jacobson, 2021). As such, it is important for educators to understand how best to support their students with trauma in a way that maximizes feelings of safety and choice but that also promotes ongoing behavioral and academic growth. In Jimmy's case, a team-based approach was implemented to ensure that his needs across domains were met but it was his classroom teacher who identified that he required additional mental health supports provided by the first author to be successful. Jimmy's case highlights that as the staff who typically spend the most time with students, classroom teachers should be trained in trauma-informed approaches to classroom management and understanding of how ACEs affect student functioning (Attwood et al., 2022).

Such an intervention package cannot be developed or implemented by one teacher or case manager. Although such a comprehensive approach may be challenging for staff working outside of an alternative education setting to implement, it will be worthwhile for educators to invest time and resources into proactively addressing the multifaceted needs of students who exhibit significant social-emotional struggles upfront as a team. Whereas many schools and districts employ a reactive, compartmentalized approach, Jimmy's case highlights the need for staff to work collaboratively and consistently to promote meaningful change. In particular, the first author, as mental health provider, was able to collaborate with other educators and staff members to promote the use of ACT strategies across settings.

ACT and CICO were implemented in a complimentary fashion to target different areas of functioning but were both characterized by a focus on interdependence and positive relationships with adults at school. While the spe-

cific impact of the various intervention elements cannot be teased out (i.e., how much CICO contributed to outcomes vs. ACT and TIC), Jimmy's team felt that all the services in conjunction with the academic supports outlined in his IEP, likely served to address his varied mental health, behavioral, and learning needs simultaneously.

Adverse childhood experiences are a common experience for many students (CDC, 2019). For an increasing number of these students, the resulting stress and trauma can lead to suicide ideation and (para)suicide incidents. This case study outlines the various supports a school team implemented for one such student. Practitioners working across the spectrum of educational institutions must be prepared to implement effective strategies and create similarly safe, welcoming environments for these students while promoting connections in the school environment and maintaining high behavioral expectations.

REFERENCES

- Andrews, W., Houchins, D., & Varjas, K. (2017). Student-directed check-in/check-out for students in alternative education settings. *Teaching Exceptional Children*, 49(6), 380–390. https://doi.org/10.1177/0040059917701122
- Attwood, A. I., Barnes, Z. T., Jennings-McGarity, P. F., & McConnell Ill, J. R. (2022). Preservice teacher perceptions of adverse childhood experiences: an exploratory study for an educator preparation program. *Preventing School Failure: Alternative Education for Children and Youth*, 66(2), 160–166. https://doi.org/10.1080/1045988X.2021.2002248
- Becker, G., Orbach, I., Mikulincer, M., Iohan, M., Gilboa-Schechtman, E., & Grossman-Giron, A. (2019). Reexamining the mental Pain–Suicidality link in adolescence: The role of tolerance for mental pain. Suicide & Life-Threatening Behavior, 49(4), 1072–1084. https://doi.org/10.1111/sltb.12506
- Boden, L. J., Jolivette, K., & Alberto, P. A. (2018) The Effects of check-in, check-up, check-out for students with moderate intellectual disabilities during on- and off-site vocational training. *The Journal of Classroom Interaction*, 53(1), 4–21.
- Brown, F. J., & Hooper, S. (2009). Acceptance and Commitment Therapy (ACT) with a learning disabled young person experiencing anxious and obsessive thoughts. *Journal of Intellec*tual Disabilities, 13(3), 195–201. https://doi.org/10.1177/1744629509346173
- Carrion, V. G., & Wong, S. S. (2012). Can traumatic stress alter the brain? understanding the implications of early trauma on brain development and learning. *Journal of Adolescent Health*, *51*(2), 23–28. https://doi.org/10.1016/j.jadohealth.2012.04.010
- Carrow-Woolfolk, E. (2011). Oral and Written Language Scales Second Edition (OWLS-II). Western Psychological Services.
- Cavanaugh, B. (2016). Trauma-informed classrooms and schools. *Beyond Behavior*, 25(2), 41–46. https://doi.org/10.1177/107429561602500206
- Centers for Disease Control and Prevention. (2019). Adverse childhood experiences: Preventing early trauma to improve adult health. CDC. https://www.cdc.gov/vitalsigns/aces/pdf/vs-1105-aces-H.pdf
- Cole, S. F., Eisner, A., Gregory, M., Ristuccia, J. (2013). Helping traumatized children learn: Creating and advocating for trauma sensitive schools. Massachusetts Advocates for Children. http://www.traumainformedcareproject.org/resources/HTCL-Vol-2-Creating-and-Advocating-for-TSS.pdf

- Cole, S., Greenwald O'Brien, J., Gadd, M. G., Ristuccia, J., Wallace, D. L., Gregory, M. (2005). Helping traumatized children learn: A report and policy agenda. Massachusetts Advocates for Children. https://traumasensitiveschools.org/wp-content/uploads/2013/06/Helping-Traumatized-Children-Learn.pdf
- Crone, D. A., Hawken, L. S., & Horner, R. H. (2010). *Responding to problem behavior in schools:* The Behavior Education Program (2nd ed.). Guilford.
- Delaney-Black, V., Covington, C., Ondersma, S. J., Nordstrom-Klee, B., Templin, T., Ager, J., Janisse, J., & Sokol, R. J. (2002). Violence exposure, trauma, and IQ and/or reading deficits among urban children. *Archives of Pediatrics and Adolescent Medicine*, 156(3), 280–285. https://doi.org/10.1001/archpedi.156.3.280
- Drevon, D. D., Hixson, M. D., Wyse, R. D., & Rigney, A. M. (2019). A meta-analytic review of the evidence for check-in check-out. *Psychology in the Schools*, 56(3), 393–412. https://doi.org/10.1002/pits.22195
- Felitti V. J., Anda R. F., Nordenberg D., Williamson D. F, Spitz A. M., Edwards V., Koss M. P., Marks J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. The Adverse Childhood Experiences (ACE) Study. American Journal of Preventive Medicine, 14(4). 245–58. https://doi: 10.1016/s0749-3797(98)00017-8. PMID: 9635069.
- Gandhi, A. G., Ogut, B., Stein, L., Bzura, R., & Danielson, L. (2018). Enhancing accessibility for students with decoding difficulties on large-scale reading assessments. *Journal of Learn*ing Disabilities, 51(6), 540–551. https://doi.org/10.1177/0022219417714774
- Garcia, Y., Keller-Collins, A., Andrews, M., Kurumiya, Y., Imlay, K., Umphrey, B., & Foster, E. (2022). Systematic review of acceptance and commitment therapy in individuals with neurodevelopmental disorders, caregivers, and staff. *Behavior Modification*, 46(5), 1236–1274. https://doi.org/10.1177/01454455211027301
- Hackney, A. J., Jolivette, K., & Sanders, S. (2023). Integrating trauma-informed practices into Check-In/Check-Out for use in alternative education settings. *Intervention in School and Clinic*. https://doi.org/10.1177/10534512231183968
- Harris, R. (2019). ACT made simple: an easy-to-read primer on acceptance and commitment therapy (2nd ed.). New Harbinger Publications.
- Hayes S. C. (2016). Acceptance and Commitment Therapy, Relational Frame Theory, and the third wave of behavioral and cognitive therapies - Republished article. *Behavior Thera*py, 47(6), 869–885. https://doi.org/10.1016/j.beth.2016.11.006
- Hill, D. (2021, November 29). Let's get hopeless and a little creative about our striving. Psychology Today. https://www.psychologytoday.com/us/blog/striving-thriving/202111/let-s-get-hopeless-and-little-creative-about-our-striving.
- Individuals with Disabilities Education Act of 2004, Pub. L. 108-446, § 118 Stat. 2647 (2004).
- Jacobson, M. R. (2021) An exploratory analysis of the necessity and utility of trauma-informed practices in education, *Preventing School Failure: Alternative Education for Children and Youth*, 65:2, 124–134, DOI: 10.1080/1045988X.2020.1848776
- Jimenez, M. E., Wade, R., Jr., Lin, Y., Morrow, L. M., & Reichman, N. E. (2016). Adverse experiences in early childhood and kindergarten outcomes. *Pediatrics*, 137(2), e20151839. https://doi.org/10.1542/peds.2015-1839
- Kern, L., Harrison, J. R., Custer, B. E., & Mehta, P. D. (2019). Factors that enhance the quality of relationships between mentors and mentees during check & connect. *Behavioral Disorders*, 44(3), 148–161. https://doi.org/10.1177/0198742918779791
- Kuban, C., & Steele, W. (2011). Restoring safety and hope: From victim to survivor. Reclaiming Children and Youth, 20(1), 41–44.
- Knight, C. (2019). Trauma informed practice and care: Implications for field instruction. *Clinical Social Work Journal*, 47(1), 79–89. https://doi.org/10.1007/s10615-018-0661-x

- Koizumi, M., & Takagishi, H. (2014). The relationship between child maltreatment and emotion recognition. *PloS one*, 9(1), e86093. https://doi.org/10.1371/journal.pone.0086093
- Luciano C, Valdivia-Salas S, & Ruiz FJ (2012). The self as the context for rule-governed behavior. In L McHugh, & I. Stewart (Eds.), *The self and perspective taking: Research and Applications* (pp. 143–160). Context Press.
- Margolis, A. E., Broitman, J., & Ohio Library and Information Network. (2023). Learning disorders across the lifespan: A mental health framework. Springer. https://doi.org/10.1007/978-3-031-21772-2.
- Mento, C., Silvestri, M. C., Muscatello, M. R. A., Rizzo, A., Celebre, L., Bruno, A., & Zoccali, A. R. (2020). Psychological pain and risk of suicide in adolescence. *International Journal of Adolescent Medicine and Health*, 34(3), pp. 20190270. https://doi.org/10.1515/jijamh-2019-0270
- Murray, K. J., Williams, B. M., Tunno, A. M., Shanahan, M., & Sullivan, K. M. (2021). What about trauma? accounting for trauma exposure and symptoms in the risk of suicide among adolescents who have been adopted. *Child Abuse & Neglect*, 130(2), https://doi.org/10.1016/j.chiabu.2021.105185
- Nemati, S., Pourtaleb, N., BadriGargari, R., Hashemi, T., Deetjen, R., & Shojaeian, N. (2022). The effectiveness of acceptance and commitment training program on the level of academic stress and academic burnout in students with specific learning disability. Advances in Neurodevelopmental Disorders. Advance online publication. https://doi.org/10.1007/s41252-022-00307-0
- Parameswaran, U. D., Molloy, J., & Kuttner, P. (2023). Healing schools: A framework for joining trauma-informed care, restorative justice, and multicultural education for whole school reform. *The Urban Review*. Advance online publication. https://doi.org/10.1007/ s11256-023-00666-5
- Porche, M. V., Fortuna, L. R., Lin, J., & Alegria, M. (2011). Childhood trauma and psychiatric disorders as correlates of school dropout in a national sample of young adults. *Child Development*, 82(3), 982–998. https://doi.org/10.1111/j.1467-8624.2010.01534.x
- Rajaraman, A., Austin, J. L., Gover, H. C., Cammilleri, A. P., Donnelly, D. R., & Hanley, G. P. (2022;2021;). Toward trauma-informed applications of behavior analysis. *Journal of Applied Behavior Analysis*, 55(1), 40–61. https://doi.org/10.1002/jaba.881
- Rostami M., Veisi N., Jafarian Dehkordi F., Alkasir E. (2014). Social anxiety in students with learning disability: Benefits of acceptance and commitment therapy. *Practice in Clinical Psychology*, 2(4), 277–284.
- Sampoornam, W. (2020). In-depth analysis of clinical case study on parasuicide counselling in dhanvantri critical care center at erode. *International Journal of Nursing Education and Research*, 8(4), 495–496. https://doi.org/10.5958/2454-2660.2020.00109.X
- Sanderson, M., Bulloch, A. G., Wang, J., Williams, K. G., Williamson, T., & Patten, S. B. (2020). Predicting death by suicide following an emergency department visit for parasuicide with administrative health care system data and machine learning. *E Clinical Medicine*, 20, 100281-100281. https://doi.org/10.1016/j.eclinm.2020.100281
- Sandoz, E., Boullion, G., & Rachal, D. (2019). Second and third wave behavior therapy. In R. A. Rehfeldt, J. Tarbox, M. Fryling, and L. Hayes (Eds.), Applied behavior analysis of language and cognition (pp. 250–263). New Harbinger Publications.
- Shanahan, T. (2023). A review of the evidence on tier 1 instruction for readers with dyslexia. *Reading Research Quarterly*, 58(2), 268–284. https://doi.org/10.1002/rrq.438
- Shonkoff, J. P., Garner, A. S., Siegel, B. S., Dobbins, M. I., Earls, M. F., Garner, A. S., McGuinn, L., Pascoe, J., & Wood, D. L. (2012). The lifelong effects of early childhood adversity and toxic stress. *Pediatrics*, 129(1), e232-e246. https://doi.org/10.1542/ peds.2011-2663

- Stewart, S. M., Eaddy, M., Horton, S. E., Hughes, J., & Kennard, B. (2017). The validity of the interpersonal theory of suicide in adolescence: A review. *Journal of Clinical Child and Adolescent Psychology*, 46(3), 437–449. https://doi.org/10.1080/15374416.2015.1020 542
- Substance Abuse and Mental Health Services Administration. (2014). SAMHSA's concept of trauma and guidance for a trauma-informed approach. HHS Publication No. (SMA) 14-4884. Substance Abuse and Mental Health Services Administration.
- Swoszowski, N.C., & Rollins, L. H. (2019). Varying intensities and configurations for CICO and CICUCO. Preventing School Failure, 63(3), 203–210. https://doi.org/10.1080/10459 88X.2018.1561409
- Weber, M. A., Rich, S. E., Gann, C. J., Duhon, G. J., & Kellen, S. S. (2019). Can Less Be More for Students At-Risk for Emotional and Behavioral Disorders: Evaluating Components of Check-In/ Check-Out. *Education & Treatment of Children, 42*(4), 469–488. https://doi-org.uc.idm.oclc.org/10.1353/etc.2019.0022
- Zarse, E. M., Neff, M. R., Yoder, R., Hulvershorn, L., Chambers, J. E., & Chambers, R. A. (2019). The adverse childhood experiences questionnaire: Two decades of research on childhood trauma as a primary cause of adult mental illness, addiction, and medical diseases, *Cogent Medicine*, 6(1), 1–24. DOI: 10.1080/2331205X.2019.1581447

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