

## COMMENTARY: Complex Post-Traumatic Stress Disorder: Implications for Individuals with Autism Spectrum Disorders – Part I

### Abstract

*The term Complex Post-Traumatic Stress Disorder (CPTSD), (Herman, 1992) describes the clinical presentation of individuals exposed to repeated trauma. Clinical experience and prevalence studies support the increased vulnerability of individuals with Autism Spectrum Disorders (ASD) to repeated trauma. This paper offers hypotheses regarding the manner in which individuals with ASD may process trauma, and the manner in which the core features of ASD may effect subsequent clinical presentations. Evidence-based practice arising from the psychotherapeutic treatment of both neurotypical and individuals with ASD is reviewed. An emphasis on the value of modifying cognitive-behavioural therapeutic approaches and a description of methods to do so, to address the need of individuals with ASD and CPTSD, is highlighted.*

It is little wonder that parents of children with Autism Spectrum Disorder (ASD), a complex neurodevelopmental disorder with potentially multiple genetic, environmental, pathophysiological, precipitants and perpetuates, struggle to understand how best to respond to divergent opinions regarding methods to optimize the quality of their child's (children's) life.

Valerie Paradiz (2002), the mother of Elijah and author of *Elijah's Cup*, speaks directly to this dilemma regarding the validity and reliability of the current Diagnostic and Statistical Manual (DSM-IV-TR; American Psychiatric Association (APA), 2000) criteria for ASD. She exclaims:

The professional literature on autism, which I rely on for information about Elijah's way of life, is impossible to embrace wholeheartedly. Elijah fits the diagnostic picture and yet he is framed by a language that cannot shake its negativities and technicalities, a language so cautiously self-involved with clinical precision that it overlooks the problem of its own ephemeral standards and presumptuous conventions. (p. 60)

The increase in prevalence of mental health concerns in individuals with ASD is well documented (Deb, Thomas, & Bright, 2001; Kim, Szatmari, Bryson, Steiner, & Wilson, 2000). Ghaziuddin (1998) reported that 56 percent of a small cohort (n = 35) of individuals with ASD had psychiatric disorders including attention deficit disorders with hyperactivity, oppositional defiant disorders, Tourette syndrome, depression, obsessive compulsive disorder, generalized anxiety disorders, separation anxiety and learning disabilities. Interestingly, no

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cases of Post-Traumatic Stress Disorder (PTSD) were included in his cohort. Although not well studied in individuals with ASD, the prevalence of emotional, physical and sexual abuse in individuals with Intellectual Disabilities (ID) is alarming. Sullivan and Knutson (2000) in a study of 50,278 children in Nebraska reported that 31 percent of children in this group with an ID had been abused versus 11 percent of children without an ID.

In their landmark book, *The Aurora Project: Counselling People with Developmental Disabilities who have been Sexually Abused*, Mansell and Sobsey (2001) formulated reasons for this increased rise of abuse. These included:

1. Children with ID may not report abuse because they don't understand what abuse is or what acts are abusive.
2. They experience a lack of understanding of boundary issues.
3. They fear not having their needs met if disclosure is made.
4. They fear retaliation or loss of care if disclosure is made.
5. They may have experienced a lack of response to previous disclosures of abuse and a subsequent increase in abuse.
6. Their inability to escape or resist due to physical disabilities.
7. Their inability to report or to be deemed a credible reporter due to communication deficits.
8. They live in environments (Sobsey, 1994) characterized by extreme power and control inequalities, isolation, dehumanization and detachment, and the potential for abuse by peers.
9. With respect to power inequalities, it was noted that less than 10 percent of offenders have disabilities themselves, but over half of perpetrators have 'care-giving' relationships with victims, and in 90 percent of cases the perpetrator is known to the victim before the onset of abuse. Perpetrators typically offend multiple times before they are apprehended.
10. Inadequate screening processes during hiring allow perpetrators to systematically select positions in which they have access to potential victims.

Negative social attitudes continue to be directly transferred to the very victims struggling to live their lives with challenges associated with intellectual and physical disabilities. "Communities like the Salem of old," as advocate Robert Perske (1991) has written "can still get caught up in an overwhelming urge to cleanse themselves by finding and killing a scapegoat." (p. 315). When this happens, he argues

... people with mental disabilities become the easiest to bear false witness against, the easiest from which to coerce a confession, the easiest to denigrate in the press, and the easiest to ignore when it comes to fighting for their constitutional rights. (pp. 315-316)

Characterized by the triad of deficits in language acquisition and communication, impairment in the establishment and maintenance of interpersonal relationships, narrowed areas of interest, and stereotypical behaviour, individuals with ASD certainly share or experience many or all of the risk factors to abuse, as noted above.

Case reports (Fernando & Medlicott, 2009) confirm that PTSD does develop in individuals with ASD, emphasizing the challenges of establishing valid diagnoses consistent with DSM-IV-TR criteria (highlighting well-documented limitations of the DSM-IV-TR in establishing Axis I and II mental health diagnosis in individuals with ID and ASD).

Douglas Bilkin (2000) has written that "experiences at society's margins can inform and possibly transform meanings at the dominant culture centre of society" (p. 444). If we are compassionately committed to accept the responsibility to know what happens at the margins of society, and bear witness to the injustices that occur there, to more adequately prevent abuse and assess and optimally treat victims of abuse with ASD, it would appear we need to refocus our lenses and alter our perspectives.

We need to acknowledge that current prevalence rates of abuse are likely gross underestimates and multiple systemic barriers persist

regarding accessing best-practice assessment and support modalities. If we listen closely, we will hear critiques of our current approaches. In *Bring in the Idiots*, Nazeer (2006) comments:

Psychologists find it difficult to help autistic individuals for a variety of reasons. Craig and I both saw psychologists throughout our teens, being autistic also meant that we were already thinking harder throughout our teens about how we related to other people and why were acting the way we were. Being autistic meant that we had to be more deliberate in the matters anyway; talking to a psychologist often felt like a duplication of effort. First we'd have to bring the person up to date on our own thoughts and then we'd have to watch them fumble towards an answer, though we clearly had one of our own. Also, because we were smart and very aware of being smart in an irritating clever boy-good-with-numbers-and-long-words sort of way, we were rarely convinced that their answers were any better than our own. (p.158)

The publication of the *Diagnostic Manual-Intellectual Disability (DM-ID) A Textbook of Diagnosis of Mental Disorders in Persons with Intellectual Disability* by the National Association for the Dually Diagnosed in association with the American Psychiatric Association (Fletcher, Loschen, Stavrakaki, & First, 2007) is a step forward, recognizing that the DSM-IV gives insufficient guidance on procedures for assessing psychiatric disorders in the presence of intellectual disabilities and autism spectrum disorders.

Adaptations to current DSM-IV-TR criteria in the DM-ID include:

1. Addition of symptom equivalents
2. Omission of symptoms
3. Changes in symptom count to meet diagnostic criteria
4. Modification of symptom duration
5. Modification of age requirements
6. The addition of explanatory notes
7. The inclusion of discussion of criteria sets that do not apply to specific populations of individuals with ID.

In reviewing existing DSM-IV-TR (APA, 2000) diagnostic criteria for PTSD, in the DM-ID, Tomosulo and Razza (2007) note that the establishment of an accurate diagnosis of PTSD in individuals with intellectual disabilities (ID) is complicated conceptually by: 1) The role of developmental level in a) the manifestation of trauma-related sequelae and b) in determining what constitutes an extreme traumatic stressor. 2) The lack of diagnostic clarity in the general population. They cite Bessel van der Kolks' (McFarlane & van der Kolk, 1996) conclusion that "the developmental level at which trauma occurs has a major impact on the capacity of the victim to adapt" (p. 568).

Although there is no specific reference to individuals with ASDs in the DM-ID review of PTSD, Tomosulo and Razza (2007) suggest "it appears that the high levels of self-injurious behaviour among people with ID are likely a function of exposure to trauma at lower development levels (p. 367). Their review of the literature confirms the paucity of information available specific to the assessment and treatment of individuals with ASDs and Complex PTSD. Razza (1997) has expanded on Hermans (1992) concept of Complex PTSD in a clinical case study of the psychotherapeutic treatment of an individual with ID and Complex PTSD.

In 1992 Judith Herman, in her ground breaking book *Trauma and Recovery: The Aftermath of Violence—from Domestic Abuse to Political Terror*, introduces the term Complex PTSD to describe a syndrome that follows repeated trauma. She suggested that:

The responses to trauma are best understood as a spectrum of conditions rather than a single disorder. They range from a brief stress reaction that gets better by itself and never qualifies for a diagnosis, to simple post-traumatic stress disorder, to the complex syndrome of prolonged trauma. (p. 119)

In assessing and observing the response of individuals without ID to exposure to repeated traumatic events, Herman noted that victims adapted in ways leading to retardation of the growth of normative social and emotional capacities, a stunting of self-development and significant impairment in daily life routines. Self-deregulation, an impairment in the abil-

ity to moderate arousal, attention, cognition and related behaviours, and difficulty in integrating these capacities was noted. Affective, anxiety related, somatoform symptoms, obsessions and compulsions, substance abuse and unrecognized dissociation occurring in these individuals did not appear to be adequately captured in existing DSM-IV criteria for PTSD. The lack of formal published treatment guidelines for PTSD was also noted.

Herman (1992, p. 121) proposed seven criteria to capture the complexity of the spectrum of PTSD not adequately addressed in the DSM-IV. These criteria included:

1. A history of subjection to totalitarian control over a prolonged period, including for the purposes of our discussion, childhood physical and sexual abuse in household or institutional environments
2. Alterations in the regulation of affective impulses
3. Alterations in attention and consciousness (amnesia or hypermnesia for the traumatic event, dissociation, depersonalization/derealization, and reliving experiences either in the form of intrusive PTSD symptoms or ruminative preoccupation
4. Alterations in self-perception (a sense of helplessness or paralysis of initiative, shame, guilt and self-blame, sense of defilement or stigma) a sense of complete difference from others
5. Alterations in perception of the perpetrator (preoccupations with the relationship with perpetrator, unrealistic attribution of total power to the perpetrator, idealization or paradoxical gratitude, a sense of special or supernatural relationship with the perpetrator, acceptance of belief system or rationalizations of the perpetrator
6. Alterations in relationships with others, including isolation and withdrawal, disruption in intimate relationships, persistent distrust, and repeated search for a rescuer
7. Alterations in systems of meaning including a loss of sustaining faith and a sense of hopelessness and despair.

Bessel van der Kolk (as cited in Rothschild, 2000, p. 3) has noted that “if it is true that the cause of our traumatized and neglected patients” disorganization is the problem that they cannot analyze what is going on when they re-experience the physical sensations of past trauma, but that these sensations just produce intense emotions without being able to modulate them, then our therapy needs to consist of helping people stay in their bodies and understand their bodily sensations. That is certainly not something that any of our traditional psychotherapies, which we have been taught, help people to do very well. In attempting to understand the assessment and treatment implications of complex PTSD in individuals with ASD, we first need to acknowledge the potential impact of the experience of the trauma and the clinical presentation of these individuals by the hypothesized cognitive deficits known to occur in individuals with ASD. These include:

1. *Theory of mind (Mind-Blindness)*: deficits in the individual’s ability to empathize, to identify or attribute thinking styles and feeling states to oneself and others and/or the ability to have an appropriate emotional reaction to another person (the ability to sympathize) (Baron-Cohen, 1995). Theory of mind has implications with respect to increasing the vulnerability of individuals with ASD to abuse may theoretically produce distortions in self-perception post-trauma, possibly different from those observed in neurotypical victims of trauma, and creates different challenges in the establishment of a therapeutic alliance with a therapist in individual therapy and/or relationships with peers in group therapy.
2. *Executive dysfunction*: the presence of frontal lobe pathology (Ozonoff & Strayer, 1994) impeding the ability to shift attention, self priorities, inhibit social responses, set priorities and organize. This cognitive deficit may paradoxically improve the likelihood of an individual with a diagnosis of complex PTSD and ASD to respond to somatosensory therapies aimed at improving the client’s ability to regulate over-arousal. This is accompanied by the therapist carefully observing the client in therapy and in a timely manner, posing questions to assist the individual to establish the relationship between bodily responses and narrative content. Somatosensory therapies

also teach clients to recognize physical signs that indicate deregulated hyper or hypo-arousal and encourage these individuals to experiment with specific somatic interventions that promote self-regulation. Therapies de-emphasizing verbal and analytical skills, emphasizing mindful awareness of the interactions between thoughts, feelings, inner-bodily sensations and movements as they occur in the present moment may increase activity in brain regions (medial prefrontal cortex) regulating automatic over-arousal, and improving stimulus discrimination (the ability to differentiate a traumatic event from a stimulus reminiscent of the event).

Again therapies of this modality may be particularly applicable to individuals with ASD and a diagnosis of complex PTSD.

3. *Weak Central Coherence*: a preference for local detail over global processing. This is often present in individuals with ASD. In contextual behavioural trauma therapy (CBTT) (Gold, 2009) experiential avoidance is assumed to be responsible for the maintenance of complex stress disorder symptoms. Using behavioural analysis, acceptance and commitment therapy, and dialectical behavioural therapy as a foundation. CBTT identifies and modifies stimulus-response chains to diminish avoidance and intrusive symptoms. Weak central coherence in individuals with ASD may act as an asset for individuals with ASD and trauma histories, based on this formulation.
4. *Systematizing*: an enhanced ability to make sense of the world and predict behaviour of inanimate objects by input or output relationships. This cognitive world view may again place in individuals with ASD at increased risk of being abused through creating challenges to their ability to identify potential perpetrators of abuse.

The implications of a pre-existing deregulated autonomic nervous system in individuals with ASD (Baron-Cohen, 2004; Courchesne, 1995, 2004; Moldin, Rubenstein, & Hyman, 2006) regarding the initial psychosocial response to repeated trauma are unknown. In neurotypical individuals, it is formulated that the arousal of the sympathetic nervous system in response to a threat may prevent integration of attention, perception,

and arousal. Signals from the environment to the autonomic system elicit a fight or flight mode. The adrenal glands release noradrenaline and adrenaline, as well as hydrocortisone, alerting the amygdala to prompt the hypothalamus to release corticotrophin-releasing hormone which in turn increases adrenal corticotrophic hormone release, activating the flight or fight response. The physiological response of individuals with ASD with pre-existing deregulated automatic nervous systems to repeated trauma has not been studied. In neurotypical individuals, (individuals without ASDs) if death is perceived to be imminent, the parasympathetic system is activated, resulting in freezing or tonic immobility.

The hippocampus and the amygdala process highly emotionally-charged memories. The ability of this brain region to give a time and space context to memories becomes suppressed in the presence of an extreme threat giving rise to the future intrusive symptoms (flash backs, depersonalization and derealization, and panic attacks) in response to perceived real or non-real threats and dissociation, characterized by an altered sense of time, decreased sensation to pain, and a sensation of terror or horror (Rothschild, 2000). Again, the neurophysiological response in this context of individuals with ASD has not been studied.

A persistent research question of great relevance is the issue of resilience: why do the majority of neurotypical individuals exposed to a single incident of trauma not develop symptoms of PTSD? Clinically, it is felt that the most powerful determinant of psychological harm in neurotypical individuals is the characteristic of the traumatic event itself; rape, physical, psychological and moral violation of the person, being greater predictors of PTSD symptoms, than exposure to environmental events, such as fires, hurricanes or accidents. Resilience in neurotypical individuals clinically is found most often in individuals who are highly sociable, thoughtful, have an active coping style, a strong network of people willing to recognize that the traumatic event has occurred, who are willing to suspend preconceived judgements, and have the ability to tolerate the victims' fluctuating need for autonomy and self control, closeness and distance, being able to simply bear witness to the victims story. Herman (1992) has repeatedly observed that witnesses need to understand that survivors seek

fairness, compassion and someone with whom to share the guilty knowledge of what happened rather than absolution. Unfortunately, at present, there is absolutely no research attesting to whether these same prognostic indicators apply to individuals with ASD and histories of trauma.

The prevalence of PTSD in individuals with ASD exposed to a single or prolonged traumatic event is not known. Consider however the words of O'Neill (1999) an individual with ASD:

[T]he inside home of an autistic can feel like a safe refuge. Autistics are extreme examples of people who just need to be cloistered. Not all are shy, but all need to feel the calm of their inner experience. It centres and soothes some of the anxiety from outside confusion. It is comfortable to know that you have a portable sanctuary. (p. 18)

This description does not make it difficult to speculate the horrific impact of experiences leading to complex PTSD may have on the life of an individual with an ASD.

In discussing the experience of children repeatedly traumatized, Herman (1992) empathically writes:

The child faces a formidable task. She must find a way to preserve a sense of trust in people who are untrustworthy, safety in a situation that is unsafe, control in a situation that is terrifyingly unpredictable, and power in a situation of helplessness. (p. 97)

It is known that this potential deformation of world view of a child with ASD is likely further complicated by the well documented hypo and hyper sensory sensitivities experienced by individuals with ASD. O'Neill (1999) continues

... the autistic brain functions in a way that means autistics can focus attention like a laser beam, excluding most other stimuli. At the same time, this type of brain has a different way of orienting to various stimuli, so the individual may strongly react to a tiny sound that nobody else can hear. Or the individual may be unable to tune out background noise that is a mere hum to everyone else. (p. 20)

Individuals with ASD may also experience synesthesia, a neurological mixing of the

senses. Tammet (2006), author of *Born on a Blue Day—Inside the Extraordinary Mind of an Autistic Savant*, describes a vivid account of this neurological phenomenon. He explains "mine is an unusual and complex type through which I see numbers as shapes, columns, textures and emotions"(p. 2). This sensory experience has allowed Daniel the ability to calculate high numbers in his head without undue effort ultimately allowing him to set a world record by memorizing pi (the ratio of a circle's circumference to its diameter) to 22,514 digits.

This phenomenon could theoretically impact on the encoding of sensory experiences during trauma experienced by people with ASD, complicate a therapist's ability to identify potential antecedents to intrusive symptoms post-trauma, causing the validity of atypical intrusive or constrictive symptoms of complex PTSD to be questioned. This likely has and will continue to lead to misdiagnosis and create barriers to treatment for individuals with ASD. A principle tenant of CBTT is:

understanding that no antecedent experience (whether an observable or private feeling, bodily sensation, thought, or consequence) is too small to be identified as a meaningful part of the problem, and can be utilized as a therapeutic step toward solving more severe chronic sequelae repeated traumas. (Gold, 2009, p. 271)

This could not be possibly more true than in the treatment of an individual with complex PTSD and ASD.

The concept of providing contextual trauma treatment is also of paramount importance in addressing the needs of individuals with ASD and complex PTSD. Evidence from the Trauma, Resolution and Integration Program (TRIP) a community-based outpatient treatment program (Gold, Hyman, & Andres, 2004) found that standard trauma therapies provided to neurotypical individuals focussing specifically on presenting signs and symptoms of PTSD often led to an escalation of distress. It was concluded that the content in which repeated abuse occurred, for example, being raised in an ineffective, unpredictable and emotionally unresponsive family, growing up with emotionally distant, disinterested family members modelling counterproductive methods of solv-

ing interpersonal problems (substance abuse, aggression) understandably prevents the development of a secure attachment in the survivor, and promotes the adoption of maladaptive coping strategies. In the absence of security, reliability, consistent affection, emotional validation, and support, the critical first challenge in the therapeutic process in the treatment of an individual with complex PTSD is to promote the development of a sense of safety, security and connection (Gold, 2009). The life histories of many individuals with ASD who have been institutionalized or have experienced multiple foster home placements is of paramount importance in the formulation of the process necessary in the initial phase of a psychotherapeutic support plan to foster the development of an optimal therapeutic alliance.

Herman (1992, pp. 147–151) has articulated principles which should be heeded as various evidence-based psychotherapeutic and psychosensory treatment approaches to the treatment of complex PTSD emerge with promise. These principles include:

1. Recognizing the uniqueness of the individual, their strengths, resources, resilience, personalized needs, values and developmental (contextual) history
2. Ensuring that the therapist is an active, empathic, responsive, listener creating a therapeutic environment promoting personal empowerment and facilitating emotional validation
3. The maintenance of appropriate boundaries and acknowledgement of the inherent power differences in the therapeutic relationship while fostering collaboration and supporting the client's ultimate authority over his or her life.

These values resonate with those embedded in best-practice person-centred planning for individuals with ASD (Nachshen et al., 2008; Perry, & Condillac, 2004).

Herman (1992, pp. 156–236) enumerates a number of potential treatment goals in support of individuals with complex PTSD. These include:

1. Establishing physical and psychological stability, safety, and stability, including overcoming developmental deficits
2. Enhanced self-esteem and trust
3. Decreased severity of symptoms
4. Reestablishment of a normal stress response
5. Deconditioning of anxiety, fear, enhancing personality integration and recovery of dissociated emotional knowledge
6. Processing of emotions and traumatic memories and acquiring skills for future emotional experience
7. Recovery from co-morbid problems and enhancing physical health
8. Maintaining or improving adaptive functioning and social relationships
9. Re-engagement in life, restoring the capacity for secure, organized, and relational attachments
10. Enhanced social support
11. The development of a relapse prevention program.

Three stages of phases of treatment have been proposed to address issues in the treatment of individuals with complex PTSD. It is suggested that these be individualized but be followed in a sequential and hierarchical order.

*Phase one* stresses that personal and interpersonal safety is an essential element that must first be established prior to proceeding to further steps in therapy.

*Phase two* involves the safe, self-reflective disclosure of traumatic memories and associated reactions and the progressive development of a coherent autobiographical narrative of the traumatic experience.

*Phase three* promotes reintegration, resolving developmental deficits and fine-tuning emotion and behavioural self-regulatory skills, ulti-

mately allowing the development of intimate, trust-worthy relationships.

Courtois and Ford (2009), editors of *Treating Complex Traumatic Stress Disorder—An Evidence-Based Practice*, conclude extant clinical knowledge base suggests that:

... safety-focused, strength-based, self-defining, self-regulation enhancing, self-integrating, avoidance challenging, individualized approaches to treatment delivered by emotionally healthy and professionally responsible therapists who have specialized training and professional resources to support this very demanding work, make an important difference in the lives of those who have had substantial life adversity. (p. 101)

Individuals diagnosed ultimately with complex PTSD often are misdiagnosed, particularly with Borderline Personality Disorder (BPD), (45-80 percent of individuals with BPD report histories of childhood sexual abuse) (Herman, Perry, & van der Kolk, 1989). The maladaptive, intrusive and constrictive symptoms which characterize complex PTSD result in chronic histories of emotional lability, unstable and disturbed interpersonal relationships (arising from oscillations in the need for closeness versus avoidance), an unstable sense of self, affective instability, co-morbid substance abuse, anger and terror in response to unrecognized antecedents to dissociative symptoms which characterize complex PTSD. This constellation of symptoms parallels many or all of the DSM-IV-TR criteria for BPD. The amplification or attenuation of these systems in the presentations of individuals with ASD and histories of repeated exposure to traumatic interpersonal events may also be contributing to a paucity of clinical experience and publications addressing what can only be, at present, a grossly under reported and unrecognized condition. It is frightening to imagine the frequency at which trauma survivors with ASD and PTSD are re-victimized.

Clinicians (Stoddart, Burke, & King, in press) acknowledge the under and over-reporting of symptoms in mental health assessments and psychotherapeutic relationships due to:

1. The cognitive profile of individuals with ASD
2. Alexithymia

3. Lack of understanding of emotions
4. Poor-emotional recall
5. Poor understanding of typical levels of anxiety.

Levitas and Gibson (2001) caution that it may be extremely difficult for individuals with ASD to articulate the difference between sensory overload experiences and dissociative phenomena in the context of traumatic experiences.

The capacity of individuals with ID and ASD to benefit from psychotherapy has recently been debated (Beail, 2005; King, 2005; Sturmey, 2005; Taylor, 2005). The consensus however is that all individuals, regardless of intellectual ability, can theoretically benefit from psychotherapy with appropriate modifications (Willmer, 2006). A national network of professionals interested in providing CBT to individuals with ID and mental health problems, funded by the Bailey Thomas Foundation in the U.K. has stimulated interest in research and debate as well as the publication of a special issue (2006) of the *Journal of Applied Research in Intellectual Disabilities*. Topics include:

1. Readiness to engage in CBT
2. Barriers to treatment
3. The actual assessment of the individual's component skills necessary to participate in CBT
4. Methods to assist individuals to differentiate between thoughts, feelings and behaviours
5. Applications to specific client groups (included individuals with ID and histories of sexually offending behaviour)
6. Methods to distinguish between cognitive distortions and deficits
7. Extending these efforts to the assessment and treatment of individuals with ASD and histories placing them at risk of having complex PTSD as per Herman's description, will honour Herman's compassionate belief that bearing witness is important. It is important to all, to move people from living a double



reality, consisting of what's left of their old value system (and self, word view) and their perpetrators view on the world, to a healthier view of themselves and their community.

In the absence of the inclusion of the diagnosis of Complex PTSD in the DSM-IV-R (2000), the prevalence and clinical presentation of Complex PTSD remains poorly understood at present both in typical individuals and specifically in individuals with ASDs. First person narratives provided by individuals with ASD with verbal skills adequate to allow them to describe their subjective experience post-trauma, will be invaluable in advancing our understanding of this concept and in informing the development of assessment tools and appropriate modifications to psychotherapeutic approaches to relieve suffering.

In part two of this series, existing evidence-based practice regarding the psychotherapeutic treatment of individuals with complex PTSD, the use of CBT and mindfulness procedures in individuals with ID will be reviewed with a view to extending these modifications to individuals with ASD and diagnosis of complex PTSD will be reviewed.

As compassionate therapists we need to bear witness, walk alongside those we support and proceed with compassion while awaiting the evidence.

## References

- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4<sup>th</sup> ed., text rev.). Washington, DC: Author.
- Baron-Cohen, S. (1995). *Mind-blindness: An essay on autism and theory of mind*. Cambridge, MA: The MIT Press.
- Baron-Cohen, S. (2004). The cognitive neuroscience of autism. *Journal of Neurology, Neurosurgery and Psychiatry*, 75, 945–948.
- Beail, N. (2005). Responses to Sturmey (2005) on psychotherapy evidence base for behavioral interventions and critical commentary. *Mental Retardation*, 43, 492–493.
- Bilken, D. (2000). Lessons from the margins, narrating mental retardation. A review essay. *Mental Retardation*, 38, 444–456.
- Courchesne, E. (1995). New evidence of cerebellar and brainstem hypoplasia in autistic infants, children and adolescents. *Journal of Autism and Developmental Disorder*, 25, 19–22.
- Courchesne, E., Redcay, F., & Kennedy, D. P. (2004). The autistic brain: Birth through adulthood. *Current Opinion in Neurology*; 17(4), 489–496.
- Courtois, C. A., & Ford, J. P. (Eds.). (2009). *Treating complex traumatic stress disorders: An evidence-based guide*. New York, NY: The Guilford Press.
- Deb, S., Thomas, M., & Bright, C. (2001). Mental disorders in adults with intellectual disability: Prevalence of functional illness among a community-based population aged between 16–64 years. *Journal of Intellectual Disability Research*, 45(6), 495–505.
- Fernando, K., & Medlicott, L. (2009). My shield will protect me against the ants: Treatment of PTSD in a client with an intellectual disability. *Journal of Intellectual & Developmental Disabilities*, 34, 187–192.
- Fletcher, R., Loschen, E., Stavrakaki, C., & First, M. (Eds.). (2007). *Diagnostic manual. intellectual disability: A textbook of diagnosis of mental disorders in persons with intellectual disability*. Kingston, NY: NADD Press.
- Ghaziuddin, M. (2005). *Mental health aspects of autism and Asperger's syndrome*. London: Jessica Kingsley Publishers Ltd.
- Gold, S. N. (2009). Contextual therapy. In C. Courtois, & J.D. Ford (Eds.). *Treating complex traumatic stress disorders. An evidenced-based guide*. New York, NY: The Guilford Press.
- Gold, S. N., Hyman, S. M., & Andres, R. A. (2004). Family of origin—Environments in two clinical samples of survivors of intra-familial extra-familial and both types of sexual abuse. *Child Abuse and Neglect*, 28(11), 1199–1212.
- Herman, J. (1992). *Trauma and recovery. The aftermath of violence—From Domestic Abuse to Political Terror*. New York, NY: Basic Books.
- Herman, J., Perry, J., & van der Kolk, B. A. (1989). Childhood trauma in borderline personality disorder. *American Journal of Psychiatry*, 146, 490–499.
- Kim, J. A., Szatmari, P., Bryson, S., Steiner, D. L., & Wilson, F. J. (2000). The prevalence of anxiety and mood problems among children with autism and Asperger syndrome. *Autism*, 4(2), 117–132.
- King, R. (2005). In support of psychotherapy for people who have mental retardation. *Mental Retardation*, 43(6), 448–450.

- Levitas, A. S., & Gibson, S. F. (2001). Predictable crisis in the lives of people with mental retardation. *Mental Health Aspects of Developmental Disabilities, 4*(3), 89-100.
- McFarlane, A. C., & van der Kolk, B. A. (1996). Conclusions and future directions. In B. A. Van der Kolk, A. C. McFarlane, & L. Weisaeth (Eds.), *Traumatic stress: The effects of overwhelming experience on mind, body, and society* (pp. 559-575). New York, NY: Guilford Press.
- Mansell, S., & Sobsey, D. (2001). *The Aurora Project: Counselling people with developmental disabilities who have been sexually abused*. Kingston, NY: NADD Press.
- Moldin, S. O., Rubenstein, J. L. R., & Hyman, S. E. (2006). Can autism speak to neuroscience? *The Journal of Neuroscience, 26*, 6893-6896.
- Nazeer, K. (2006). *Send in the idiots: Stories from the other side of autism*. New York, NY: Bloomsbury.
- Nachshen, J., Garcin, N., Moxness, K., Tremblay, Y., Hutchinson, P., Lachance, A., Beaurivage, M., Breitenbach, M., Bryson, S., Burack, J., Caron, C., Condillac, R. A., Cornick, A., Ouellette-Kuntz, H., Joseph, S., Rishikof, E., Sladeczek, I. E., Steiman, M., Tidmarsh, L., Zwaigenbaum, L., Fombonne, E., Szatmari, P., Martin-Storey, A., & Ruttle, P. L. (2008). *Screening, assessment, and diagnosis of autism spectrum disorders in young children: Canadian best practice guidelines*. Miriam Foundation, Montreal, Quebec.
- O'Neill, J. L. (1999). *Through the eyes of aliens. A book about autistic people*. London: Jessica Kingsley Publishers Ltd.
- Ozonoff, S., Strayer, D. L., McMahon, W. M., & Filloux, F. (1994). Executive function abilities in autism and tourette syndrome: An information processing approach. *The Journal of Child Psychology and Psychiatry, 35*(6), 1015-1032.
- Paradiz, V. (2002). *Elijah's cup. A family's journey into the community and culture of high-functioning autism and asperger's syndrome*. New York, NY: The Free Press.
- Perry, A., & Condillac, R. (2004). *Evidence-based practices for children and adolescents with autism spectrum disorders: Review of the literature and practice guide*. Retrieved October 3, 2010, from [www.cmho.org/pdf\\_files/EBP\\_for%20C\\_A\\_with20%\\_asdpdf](http://www.cmho.org/pdf_files/EBP_for%20C_A_with20%_asdpdf)
- Perske, R. (1991). Prisoners with mental disabilities in 1692 Salem and today. *Mental Retardation, 35*, 315-317.
- Razza, N. (1997). Trauma and interpersonal violence in the lives of individuals with mental retardation: Understanding and diagnosing PTSD. *The Habilitative Mental Healthcare Newsletter, 16*(5), 94-98
- Rothschild, B. (2000). *The body remembers. The psychophysiology of trauma and trauma treatment*. New York, NY: W. W. Norton & Company, Inc.
- Singh, N. N., Lancioni, E. G., Winton, A. S. W., Singh, A. N., Aakins, A. D., & Singh, J. (2008). Clinical and benefit-cost outcomes of teaching a mindfulness-based procedure to adult offenders with intellectual disabilities. *Behavior Modification, 32*, 622-637.
- Sturme, P. (2005). Against psychotherapy with people who have mental retardation. *Mental Retardation, 43*, 55-57.
- Sullivan, P., & Knutson, J. (1994). *The relationship between child abuse and neglect and disabilities—Implications for research and practice*. Omaha, NB: Boys Town National Research Hospital.
- Stoddart, K., Burke, L., & King, R. (in press) *Asperger syndrome in adulthood: A comprehensive guide for clinicians*. New York, NY: W.W. Norton Inc.
- Tammet, D., (2006) *Born on a blue day—Inside the extraordinary mind of an autistic savant*. New York, NY: Free Press.
- Taylor, J. L. (2005). In support of psychotherapy for people who have mental retardation. *Mental Retardation, 43*(6), 450-453.
- Taylor, J. L., Novaco, R. W., Gulmer, B. T., Robertson, A., & Thorne, I. (2005). Individual cognitive-behavioural anger management for people with mild borderline intellectual disabilities and histories of aggression. A controlled trial. *British Journal of Clinical Psychology, 44*, 367-385.
- Tomasoulo, D. J., & Razza, N. J. (2007). Post Traumatic Stress Disorder. In R. Fletcher, E. Loschen, C. Stavrakaki, & M. First (Eds.), *Diagnostic Manual-Intellectual Disability: A textbook of diagnosis of mental health disorders in persons with intellectual disabilities*. Kingston, NY: NADD Press.
- van der Kolk, B. A. (1998). Neurobiology, attachment and trauma. Presentation to the Annual Meeting of the International Society for Traumatic Stress Studies: Washington, DC.
- Willmer, P. (2006). Readiness for cognitive therapy in people with intellectual disabilities. *Journal of Applied Research in Intellectual Disabilities, 19*, 5-16.