INTRODUCTION

Offending behaviour: the role of trauma and PTSD

Vittoria Ardino*

President of the Italian Society for Traumatic Stress Studies, Center for Research and Treatment of Trauma, Italian Red Cross, Milano, (IT)

Research indicates an interlink between traumatic experiences and criminal behaviour (Ardino, 2011; Foy, Furrow & McManus, 2011; Weeks & Widom, 1998, 1989) revealing that offenders present a higher prevalence of Post-traumatic Stress Disorder (PTSD; APA, 1994) and associated symptoms when compared with the general population (Wright, Borrill, Teers & Cassidy, 2006). Available studies, however, rarely present data about specific trajectories that connect trauma and PTSD to criminal behaviour. This thematic cluster of articles—"Offending behaviour: the role of trauma and PTSD" aims to explore such trajectories and post-traumatic mechanisms in offenders.

Virtually all individuals who are at risk of offending behavior are vulnerable to a constellation of outcomes including dissociation, substance abuse, depression, and PTSD (Foa, Ehlers, Clark, Tolin & Orsillo, 1999; Roth, Newman, Pelcovitz, Van der Kolk & Mandel, 1997). Chronic and prolonged exposure to violence may evolve into a dysfunctional routine perpetrated in both family and community contexts creating "a link between experiences of violence as victims and later experiences of violence as a perpetrator" (Garbarino, 2002) through which trauma consistently appears to be the connecting factor for multifaceted expressions of violence—endured or perpetrated (Ardino, 2011). A considerable body of literature has documented the relationship between trauma/child abuse and subsequent aggressive and criminal acts (Widom & Maxfield, 2001; Smith, Ireland & Thornberry, 2005; Showyra & Cocozza, 2006). Child abuse and neglect, poverty, sexual molestation, and witnessing violence are, among others, the most common risk factors for post-traumatic reactions, aggression, and antisocial behaviour (Dziuba-Leatherman & Finkelhor, 1994; Dong et al., 2004; Finkelhor, 2008; Hussey, Chang, & Kotch, 2006).

In 1989, Widom conducted a pioneering study on 900 individuals with experience of abuse prior to the age of 11 years, and she demonstrated a clear link between trauma and antisocial behaviour, showing that such children were at a greater risk of being arrested in adolescence (Maxfield & Widom, 1996). Early studies by Widom and colleagues have been supported by other recent findings demonstrating that incarcerated male adolescents often have a history of trauma, including chronic victimization along with an intergenerational experience of violence (Burton, Foy, Bwanausi & Johnson, 1994; Erwin, Newman, McMackin, Morrissey & Kaloupek, 2000; McGruder-Johnson, Gleaves, Stock & Finch, 2000; Scarpa, 2001; Steiner, Garcia & Matthews, 1997; Vermeiren, 2003).

In adult populations, Browne, Miller, and Maguin (1999) have provided a detailed study of abuse in the lives of 150 female inmates. They reported that 70% of the women experienced severe physical violence from childhood caregivers or parents. Jordan, Schlenger, Fairbank, and Cadell (1996) reported that 78% of their sample of incarcerated women had experienced at least one event in their lives that met the DSM-IV-R criteria for an extreme event with the potential to predispose an individual to PTSD. Such studies sustain that offenders are very often exposed to traumatic events as a result of being—or having been—in a problematic social context (Garbarino, 1995).

The outlook of offenders’ contextual variables is mirrored in the high rates of PTSD, as highlighted in a review by Vermeiren (2003), ranging from 4% (Richards, 1996) to 65% lifetime PTSD (Cauffman, Feldman, Waterman & Steiner, 1998). A recent systematic review by Goff, Rose E, Rose S, and Purves (2007) found a prevalence of PTSD in sentenced prisoners ranging from 4% (Brink, Doherty & Boer, 2001) to 21.4% (Butler, Levy, Dolan & Kaldor, 2003). Other investigations examined the prevalence of PTSD among diverse forensic populations, such as incarcerated women (Bremer-Smyth, Burgess & Shults, 2004; Teplin, Abram & McClelland, 1996; Zlotnick, 1997) and incarcerated men (Gibson et al., 1999). Powell, Holt, and Fondacaro (1997) reported that 21% of their sample met 6-month criteria for PTSD, and 33% met lifetime PTSD criteria. A few studies have also investigated PTSD rates in co-morbidity with substance abuse demonstrating that incarcerated men with substance misuse problems and PTSD are more likely to have higher recidivism rates than those with only substance abuse disorders; and incarcerated women with...
both disorders are more likely to relapse than are those with only SUD (Kubiak, 2004). Thus, incarcerated individuals with co-morbid PTSD and SUD are at higher risk for remaining entrenched in the criminal justice system (Ouimette, Finney & Moos, 1999).

European prevalence studies describe a higher prevalence of PTSD symptoms in prison populations than in clinical and community samples. A German study examined 54 delinquents detained in forensic psychiatric institutions and found a lifetime prevalence of 36% for PTSD and a point prevalence of 17% (Spitzer et al., 2001). In Switzerland, 86 offenders participated in a prevalence study and showed a point prevalence of PTSD that was conservatively estimated at 27% (Urbanik, Endrass, Noll, Vetter & Rossegger, 2007).

**Limitations of current literature**

Much of the research conducted on the relationship between trauma and criminal behaviour has focused upon incarcerated young offenders (Coleman, 2005; Welfare & Hollin, 2012). Also, the majority of studies are descriptive and rarely examine the psychological mechanisms intervening in a potentially specific trauma-offending trajectory. Evans and colleagues made an interesting attempt to fill the gap by investigating the nature of perpetrators’ memories of violent crime (Evans, Ehlers, Mezey & Clark, 2007). The authors conducted semi-structured interviews with a representative sample of 105 young offenders convicted of serious violence, assessing intrusive memories, ruminations, and symptoms of posttraumatic stress disorder related to their violent crime. Participants described significant intrusive memories of the assault, and reported ruminations related to the assault. The intrusive memories tended to concern the moment when the event turned to the worse for the perpetrator demonstrating important implications for risk assessment and therapeutic interventions for violent offenders. In another study, (Evans, Mezey & Ehlers 2009) examined the prevalence and characteristics of amnesia in violent offenders; their findings showed a partial amnesia of offences associated with cognitive processing during the assault.

The importance of recognizing PTSD in offenders is underscored by personality assessment showing a negative effect of PTSD on impulsivity, aggression, negative emotions (see Cauffman et al., 1998; Steiner et al., 1997) and - in general - on affect dysregulation. Furthermore, self-regulation problems have also been consistently found to be related to re-offending risk (Andrews & Bonta, 1998; Friendship & Thornton, 2001; Grann & Wedin, 2002). In turn, such experiences may lead to both risky behaviours and to an increased risk of exposure to traumatic events and to subsequent PTSD. Very often, PTSD, in fact, may urge individuals to engage in greater risk taking behaviour or in seeking out dangerous and sensational situations as part of compulsive re-exposure to trauma (Joseph, Dalgleish, Thrasher & Yule, 1997) and as an attempt to heal unresolved traumatisation through re-enactments of their early experiences of violence (Yoder, 2005). This characteristic of trauma is not specifically mentioned into official diagnostic systems; however, Van der Kolk and colleagues effectively explain the phenomenon as a “compulsion to the trauma” (Van der Kolk, 2007; Van der Kolk, McFarlane & Van der Hart, 2007). Such re-enactments may be mirrored into both “acting-in” behaviours, such as self-harm, suicide, or depression, and “acting-out” behaviours, such as harm to others and criminal activity (Yoder, 2005) highlighting that the antisocial acting out of unresolved childhood trauma may be a consistent feature in the behaviour of offenders. In this “on-off” mechanism of acting out and compulsive re-exposure to trauma, the significance of PTSD may be crucial in understanding how post-traumatic syndromes may be involved in maintaining a high risk of reoffending; however, this must be further investigated.

This thematic cluster of articles on trauma criminal behaviour attempts to explore further the issues related to trauma, PTSD and criminal behaviour by looking at the complex consequences in terms of psychological mechanisms, behaviour, and treatment.

Foy and colleagues (2012) have written a comprehensive review of the literature about the role of PTSD in young female offenders highlighting the high prevalence of PTSD and trauma histories in this population and the role of rehabilitation of young offenders who have had adverse childhood experiences. Miller and Najavits (2012) discuss a key point for the criminal justice system and the role of trauma-informed care in prison populations, and they put forward the centrality of trauma in the lives of inmates proposing the components of what they name trauma-informed correctional care (TICC). Because prison settings are per se a caveat of unavoidable triggers such as frequent discipline from authority figures and restricted movement (Owens, Wells, Pollock, Muscat & Torres, 2008) that are likely increase trauma-related behaviours and symptoms difficult for prison staff to manage. The authors describe the importance of introducing trauma-informed principles to manage triggers and to stabilise offenders. Furthermore, the authors suggest introducing trauma-oriented psychotherapies and describe the main goals of such therapies applied to settings such as public safety, safety of inmates in custody, rehabilitation and staff, and institutional security. There is a need for further research and implementation of rehabilitation programmes for offenders that focus on the potential role of unresolved traumas in the antisocial trajectories of the offenders. Policy-makers should challenge the debate about victim-perpetrator by
providing more insight into the deeper mechanisms that facilitate both victimisation and perpetration of violence.

References

American Psychiatric Association [APA]. (1994). Diagnostic and statistical manual of mental disorders (4th ed.). Washington, DC: Author.

Andrews, D. A., & Bonta, J. (1998). The psychology of criminal conduct. Cincinnati, OH: Anderson Publishing.

Ardino, V. (2011). Post-traumatic stress in antisocial youth: A multifaceted reality. In V. Ardino (Ed.), Post-traumatic syndromes in children and adolescents (pp. 211–229). Chichester, UK: Wiley/Blackwell Publishers.

Brewer-Smyth, K., Burgess, A. W., & Shults, J. (2004). Physical and sexual abuse, salivary cortisol, and neurocognitive correlates of violent criminal behavior in female prison inmates. Biological Psychiatry, 55, 21–31.

Brink, J. H., Doherty, D., & Boer, A. (2001). Mental disorder in federal offenders: A Canadian prevalence study. International Journal of Law and Psychiatry. Special double issue on epidemiology, forensic psychiatry, and public policy, 24(4-5), 339–356.

Browne, A., Miller, B., & Maguin, E. (1999). Prevalence and severity of lifetime physical and sexual victimization among incarcerated women. International Journal of Law and Psychiatry, 22(3-4), 301–322.

Burton, D., Foy, D. W., Bwanausi, C., & Johnson, J. (1994). The relationship between traumatic experience, family dysfunction, and post-traumatic stress symptoms in male juvenile offenders. Journal of Traumatic Stress, 7(1), 83–93.

Butler, T., Levy, M., Dolan, K., & Kaldor, J. (2003). Drug use and its correlates in an Australian prisoner population. Addiction Research & Theory, 11(2), 89–101.

Caffman, E., Feldman, S. S., Waterman, J., & Steiner, H. (1998). Posttraumatic stress disorder among female juvenile offenders. Journal of the American Academy of Child and Adolescent Psychiatry, 37(11), 1209–1216.

Coleman, D. (2005). Trauma and incarcerated youth. Journal of Evidence-Based Social Work, 2(3), 113–124.

Dong, M., Anda, R. F., Felitti, V. J., Dube, S. R., Williamson, D. F., Thompson, …, Giles, W. H. (2004) The interrelatedness of multiple forms of childhood abuse, neglect, and household dysfunction. Child Abuse & Neglect, 28, 771–784.

Dziuba-Leatherman, J., & Finkelhor, D. (1994). How does receiving information about sexual abuse influence boys’ perceptions of their risk? Child Abuse & Neglect, 18(7), 557–568.

Erwin, B. A., Newman, E., McMackin, R. A., Morrissey, C., & Kaloupek, D. G. (2000). PTSD, malevolent environment, and criminality among criminally involved male adolescents. Criminal Justice and Behavior, 27, 196–215.

Evans, C., Ehlers, A., Mezey, G., & Clark, D. M. (2007). Intrusive memories in perpetrators of violent crime: Emotions and cognitions. Journal of Consulting and Clinical Psychology, 75, 134–144.

Evans, C., Mezey, G., & Ehlers, A. (2009). Amnesia for violent crimes among young offenders. Journal of Forensic Psychiatry and Psychology, 20(1), 85–106.

Finkelhor, D. (2008). Childhood victimisation. Violence, crime and abuse in the lives of young people. Oxford, UK: Oxford University Press.

Foa, E. B., Ehlers, A., Clark, D. M., Tolin, D. F., & Orsillo, S. M. (1999). The Posttraumatic Cognitions Inventory (PTCI):

Development and validation. Psychological Assessment, 11, 303–314.

Foy, D. W., Furrow, J. & McManus, S. (2011). Exposure to violence, post-traumatic symptomatology, and criminal behaviors. In V. Ardino (Ed.), Post-traumatic syndromes in children and adolescents. (pp. 199–210). Chichester, UK: Wiley/Blackwell Publishers.

Foy, D. W., Ritchie, I. K., & Conway, A. H. (2012). Trauma exposure, posttraumatic stress, and comorbidities in female adolescent offenders: Findings and implications from recent studies. European Journal of Psychotraumatology, 3, 17247, doi: http://dx.doi.org/10.3402/epjt.v3i0.17247

Friendship, C., & Thornton, D. (2001). Sexual reconviction for sexual offenders released from prison in England and Wales. British Journal of Criminology, 41, 285–292.

Garbarino, J. (1995). The American war zone: What children can tell us about living with violence. Journal of Developmental and Behavioral Pediatrics, 16(6), 431–435.

Garbarino, J. (2002). Forward: Pathways from childhood trauma to adolescent violence and delinquency. Journal of Aggression, Multitreatment, and Trauma, 6(1), xxv–xxxi.

Gibson, L. E., Holt, J. C., Fondacaro, K. M., Tang, T. S., Powell, T. A., & Turbitt, E. L. (1999). An examination of antecedent traumas and psychiatric comorbidity among male inmates with PTSD. Journal of Traumatic Stress, 12(3), 473–484.

Goff, A., Rose, E., Rose, S., & Purves, D. (2007). Does PTSD occur in sentenced prison populations? A systematic literature review. Criminal Behaviour and Mental Health, 17(3), 152–162.

Grann, M., & Wedin, I. (2002). Risk factors for recidivism among spousal assault and spousal homicide offenders. Psychology. Crime & Law, 8(1), 3–23.

Hussey, J. M., Chang, J. J., & Kotch, J. B. (2006). Child Maltreatment in the United States: Prevalence, risk factors, and adolescent. Health Consequences Pediatrics, 118(3), 933–942.

Jordan, K., Schlenker, W., Fairbank, J., & Cadell, J. (1996). Prevalence of psychiatric disorders among incarcerated women. Archives of General Psychiatry, 53, 513–519.

Joseph, S., Dalgleish, T., Thrasher, S., & Yule, W. (1997). Impulsivity and post-traumatic stress. Personality and Individual Differences, 22(2), 279–281.

Kubiak, S. P. (2004). The effects of PTSD on treatment adherence, drug relapse, and criminal recidivism in a sample of incarcerated men and women. Research on Social Work Practice, 14, 424–433.

Maxfield, G. M., & Widom, C. (1996). The cycle of violence revisited 6 years later. Archives of Pediatric & Adolescent Medicine, 150(4), 390-395.

McGruder-Johnson, A. K., Gleaves, D. H., Stock, W., & Finch, J. F. (2000). Interpersonal violence and posttraumatic symptomatology. Journal of Interpersonal Violence, 15, 205–221.

Miller, N. A., & Najavits, L. M. (2012). Creating trauma-informed correctional care: A balance of goals and environment. European Journal of Psychotraumatology, 3, 17246, doi: http://dx.doi.org/10.3402/epjt.v3i0.17246

Ouimette, P. C., Finney, J. W., & Moos, R. H. (1999). Two-year post-treatment functioning and coping of substance abuse patients with posttraumatic stress disorder. Psychology of Addictive Behaviors, 13, 105–114.

Owens, B., Wells, J., Pollock., Muscat, B., & Torres, S. (2008). Gendered violence and safety: A contextual approach to improving security in women's facilities. Washington, DC: US Department of Justice, Office of Justice Programs, National Institute of Justice.

Powell, T. A., Holt, J. C., & Fondacaro, K. M. (1997). The prevalence of mental illness among inmates in a rural state. Law and Human Behavior, 21(4), 427–438.
Richards, I. (1996). Psychiatric disorder among adolescents in custody. *Australian and New Zealand Journal of Psychiatry*, 30(6), 788-793.

Roth, S., Newman, E., Pelcovitz, D., Van der Kolk, B. A., & Mandel, F. S. (1997). Complex PTSD in victims exposed to sexual and physical abuse: Results from the DSM-IV field trial for posttraumatic stress disorder. *Journal of Traumatic Stress*, 10(4), 539-555.

Scarpa, A. (2001). Community violence exposure in a young adult sample: Lifetime prevalence and socioemotional effects. *Journal of Interpersonal Violence*, 16(1), 36-53.

Skowyra, K. R., & Cocozza, J. J. (2006). Blueprint for change: A comprehensive model for the identification and treatment of youth with mental health needs in contact with the juvenile justice system. Delmar, NY: National Center for Mental Health and Juvenile Justice and Policy Research Associates.

Smith, C. A., Ireland, T. O., & Thornberry, T. P. (2005). Adolescent maltreatment and its impact on young adult antisocial behavior. *Child Abuse and Neglect*, 29(10), 1099-1119.

Spitzer, C., Dudeck, M., Liss, H., Orlob, S., Gillner, M., & Freyberger, H. J. (2001). Post-traumatic stress disorder in forensic inpatients. *Journal of Forensic Psychiatry*, 12(1), 63-77.

Steiner, H., Garcia, I. G., & Matthews, Z. (1997). Posttraumatic stress disorder in incarcerated juvenile delinquents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 36(3), 357-365.

Teplin, L. A., Abram, K. M., & McClelland, G. M. (1996). Prevalence of psychiatric disorders among incarcerated women: Pretrial jail detainees. *Archives of General Psychiatry*, 53(6), 505-512.

Urbanik, F., Endrass, J., Noll, T., Vetter, S., & Rosseger, A. (2007). Posttraumatic stress disorder in a Swiss offender population, *Swiss Medical Weekly*, 137(9-10), 151-156.

Van der Kolk, B. A. (2007). The complexity of adaptation to trauma: Self-regulation, stimulus discrimination, and characterological development. 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. 182-213). New York: Guildford Press.

Van der Kolk, B. A., McFarlane, A. C., & Van der Hart, O. (2007). A general approach to treatment of posttraumatic stress disorder. 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. 417-440). New York: Guildford Press.

Vermeiren, R. (2003). Psychopathology and delinquency in adolescents: A descriptive and developmental perspective. *Clinical Psychology Review*, 23(2), 277-318.

Weeks, R., & Widom, C. S. (1998). Self-reports of early childhood victimization among incarcerated adult male felons. *Journal of Interpersonal Violence*, 13, 346-361.

Welfare, H., & Hollin, C. R. (2012). Involvement in extreme violence and violence-related trauma: A review with relevance to young people in custody. *Legal and Criminological Psychology*, 17(1), 89-104.

Widom, C. (1998). Childhood victimization: Early adversity and subsequent psychopathology. In B. P. Dohrenwend (Ed.), *adversity, stress, and psychopathology*. (pp. 81-95). New York: Oxford University Press.

Widom, C. S., & Maxfield, M. G. (2001). An update on the “cycle of violence”. (NCJ 184894). Washington, DC: National Institute of Justice, 200 pp.

Widom, C. S. (1989). Child abuse, neglect, and adult behavior: Research design and findings on criminality, violence, and child abuse. *American Journal of Orthopsychiatry*, 59(3), 355-367.

Wright, L., Borrill, R., Teers, R., & Cassidy, T. (2006). The mental health consequences of dealing with self-inflicted death in custody. *Counselling Psychology Quarterly*, 19(2), 165-180.

Yoder, C. (2005). The little book of trauma healing: When violence strikes and community security is threatened. Intercourse, PA: Good Books.

Zlotnick, C. (1997). Posttraumatic stress disorder (PTSD), PTSD, comorbidity and childhood abuse in incarcerated women. *The Journal of Nervous and Mental Disease*, 12, 761-763.

*Vittoria Ardino*  
President of the Italian Society for Traumatic Stress Studies  
Center for Research and Treatment of Trauma  
Italian Red Cross  
Milano  
Italy  
Email: vittoria.ardino@crimilano.it