



Trauma Reactions in the Offender

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Abstract

Significant attention has been directed toward the needs of witnesses and victims traumatized through their exposure to criminal events. Less attention has been directed at the relevance of trauma for the offender, with much of the literature directed toward debate of automatism defenses. This paper provides a background to the fallibility of memory in the context of psychological disorders and surveys the literature as it relates to evidence of such disorders in offenders. The connection with offending is discussed from the perspective of both pre and post offence behaviour morbidity and the particular relevance of psychopathology and female offending. The paper concludes with some suggestions which might facilitate the determination of the importance of trauma reactions in an offender.

Keywords: Trauma Reactions; Offender; Memory; Post Traumatic Stress Disorder

INTRODUCTION

The psychological sequelae to an incident, objectively defined as 'traumatic', may range from no reaction or mild depression through to dissociative experiences and post-traumatic stress disorder (PTSD). This article outlines the more severe responses to trauma as experienced by offenders, in particular, violent offenders. While the symptomology overlap, the two key trauma reactions discussed are PTSD and Dissociative Disorders. The importance of dissociation has recently been emphasized by Gershuny and Thayer (1999) who have found that not only is dissociation associated with trauma but that those who do dissociate are more likely to experience higher levels of trauma related distress. With respect to dissociation, I will not attempt to survey the legal commentary that has evolved around what has been termed "automatism" except where that may elucidate a clinical description. Rather, I

acknowledge the complexity of the debate surrounding sane and insane automatism, the burden of proof and the changing legal landscape (such as the recent revisions to the *Criminal Law Consolidation (Mental Impairment) Amendment Act 1995* in South Australia). The interested reader is referred to two useful articles which present legal argument: the papers by Febbo, Hardy and Finlay-Jones (1993) and McSherry (1998).

TRAUMA AND MEMORY

What an accused person remembers about a criminal event has relevance to their defense and to their rehabilitation. While amnesia represents an extreme version of memory impairment, there is ample evidence that day to day autobiographical memory is often inaccurate and frequently distorted. Memory is not a unitary phenomenon.

Note: This paper is adapted from a paper developed for the Legal and Accounting Management Seminars Pty. Ltd. (LAAMS) series, *Understanding Post-traumatic Conditions*, February to May, 2000. A version of this paper has been included in the proceedings from that conference. ⁺Address for correspondence: Mitchell K. Byrne, Department of Psychology, University of Wollongong, Northfields Avenue, Wollongong NSW 2522 AUSTRALIA. E-mail: mbyrne@uow.edu.au

We have different types of memory which often store information in different parts of the brain (Johnson, 1998). For example we have a memory for music which is often associated with feelings or emotions. We have memories for tastes and smells and for physical pain. Each of these memories has a location in the brain. For example, two important types of memory are memories for words (or language) and memories for things we see (or vision). Generally speaking, verbal information is stored in the left hemisphere of the brain, while visual information is stored in the right (Johnson, 1998). Emotion can also be a memory rather than just an influence on memories (LeDoux, 1992) and has its own identifiable neuro-anatomical memory structures (van der Kolk, 1996).

Usually, aspects of memory are more or less integrated so that we have a picture of an event in our mind with words and feelings and other sensory information linked together. However any memory is only as good as the observers ability to notice all that's happening, to retain this information and to be able to find it again at a later date. People usually make errors in one or all of these areas leading to gaps in the memory for an event. Because of these gaps, human memory tends to be a mixture of real events somewhat accurately recalled "and what the person intuitively hears or infers must have happened" (Goodman et al., 1999). This process of 'filling in the gaps' has led to the model of memory known as 'the reconstructive model' (Loftus, 1979a). The reconstructive model delineates the three stages of acquisition (the encoding of information into memory), retention (storage of that information over time) and retrieval (access of information retained).

There are threats to the integrity of the memory at all stages of the memory process. For example, given the complex nature of an 'event', particularly one where a crime occurs, an observer is unable to attend to all components of that event. Instead, they attend to, and encode, what appears most important to them according to their appraisal of what is happening. Attributions and expectations influence the way in which detail is encoded, especially in areas where only peripheral or fleeting attention is directed. For example, if a person appraises an event as "I'm being robbed" and glimpses something in the assailant's hand, it is possible that a weapon will be encoded irrespective of what the object in fact was.

After an event is encoded it may undergo further change and distortion through the presentation of misleading post event information (Thomson,

1995). This is particularly so if the memory has undergone some attrition for detail over time and the observer incorporates new information to replace the lost detail. Exposure to misleading post event information can occur in various ways: through discussions held by witnesses after a criminal event, through questioning by police and lawyers, through exposure to newspaper articles and television news, and even through the person's own thoughts and dreams, (Goodman et al., 1999).

Lastly, when the memory comes to be recalled the conditions of retrieval will have an influence on what is remembered. An important variable in the persons ability to provide an accurate and complete report of an event is the degree to which the retrieval situation matches the encoding situation, termed "context reinstatement" (Tulving, 1983). Context can include the individual's emotional and physical state at the time of the event.

If the reliability of memory is on shaky ground to begin with, it is not surprising that trauma can influence both the completeness and the accuracy of the memories with which it is associated. Extreme arousal has been reported to affect aspects of memory, especially attentional and perceptual processes. Some studies (e.g. Christianson & Hubinette, 1993; Christianson and Loftus, 1991) have reported that under extreme emotional stress, attention is 'narrowed', focusing on central (more relevant) details at the expense of peripheral details. Furthermore, it has been suggested that the details of an event and the emotions associated with it may be retained separately (Christianson, 1992). Therefore, it may be possible to remember only the specific details or only the emotional details of the event. These sorts of memory failures, formerly referred to as psychogenic amnesia, are labeled 'dissociative amnesia's (DSM IV; American Psychiatric Association, 1994).

Even though memory is unreliable, people's recollection of events still has significant importance in our criminal justice system. If an individual has a significantly impaired memory for the event for which they have been accused, the administration of justice may be compromised. Amnesia in offenders is not uncommon, especially in cases of extreme violence (Schacter, 1986b). For example, the incidence of memory impairment in a general offender population has been reported as 26% (Taylor & Kopelman, 1984) while reports in homicide cases have ranged from 10% to 70% (Porter et al., in press; Schacter, 1986a, 1986b). Generally, the incidence of amnesia increases as the

severity of the violence increases (Taylor & Kopelman, 1984).

However, amnesia, as McSherry (1998) observes, 'can be easily simulated and difficult to disprove'. How does such a condition, in the absence of an identifiable physiological cause, come about? Amnesia for emotionally traumatic events are generally referred to as dissociative amnesia's (DSM IV). There have been three main theoretical explanations for these types of amnesia: repression, state-dependent memory and amnesia resulting from a dissociative state (Porter et al., in press). Repression theories are based on the psychodynamic formulations of Freud (1922) whereby a traumatic event is buried in the subconscious. It has been suggested that repression occurs when the antisocial act is at odds with the individuals self-concept and serves to reduce intrapsychic conflict (Parwatarikar, et al., 1985). However, there is little empirical evidence which supports the repression model (Loftus, 1993) and it is inconsistent with contemporary models of memory (Porter et al., in press; Rubin, 1996).

Another explanation for dissociative amnesia relates to state – dependent memory factors. There is considerable evidence that a range of states, both emotional and physiological (including substance induced) influence memory and there is a growing body of evidence that learning and memory are *mood* state dependent, (Bower, 1981; Forgas and Moylan, 1987; Ohrt et al., 1998). Recent research has demonstrated the impact of current 'state' on both memory and behaviour. For example Schacter et al., (1996) suggests that state dependent memory may be induced by stress related hormones while Hoffman et al., (1997) have found that recurrently experienced personal memories may be associated with alcohol intoxication. Amnesia in cases of significant violence may relate to the offender's extreme level of arousal at the time of the commission of the offence and recall may then be dependent upon a recreation of the aroused state. However, such emotional arousal is unlikely to be experienced in any context other than that in which the crime took place (Parkin, 1987) and hence the memory for the crime may remain permanently lost (Porter et al., in press).

A third explanation for these types of amnesia is the experience of a dissociative state at the time of the event. A brief discussion of dissociation is useful to clarify what is meant by the dissociative state. Dissociation refers to the separation of normally integrated psychological processes. It is defined in the Diagnostic and Statistical Manual of Mental

Disorders (DSM IV) as "a disruption in the usually integrated functions of consciousness, memory, identity, or perception of the environment". While the DSM IV diagnosis of PTSD includes the *potential* for 'dissociative flashback episodes', the range of Dissociative disorders proper includes: Dissociative Identity Disorder, Dissociative Fugue, Dissociative Amnesia, Depersonalization Disorder, and Dissociative Disorder not Otherwise Specified. Steinberg, (1995) has identified five dissociative symptoms which she asserts need to be present for a diagnosis of dissociation. These symptoms are: amnesia, depersonalization, derealization, identity confusion and identity alteration.

Dissociation is dimensional rather than categorical in that we are all capable of experiencing levels of dissociation (Putnam, 1995). The continuum of dissociation, which includes, at the pathological end, conditions such as Dissociative Identity Disorder, is evident as part of the overall symptomatology in a range of disorders, including PTSD. Individuals may be more or less predisposed toward dissociation according to variables associated with their personality make-up, their experiential background and the environment present (both internal and external) at any given time. A dissociative state is an altered state of consciousness that occurs during a traumatic experience. Dissociative states may form the basis of arguments regarding criminal responsibility (Porter et al., in press), while dissociative amnesia may have relevance to the competency to stand trial.

Differentiation of state – dependent amnesia from that associated with a dissociative state at the time of the event is difficult (Swihart et al., 1999) and they may be the same phenomenon (Schacter & Kihlstrom, 1989). From a legal perspective, amnesia related to dissociative states may have more relevance for criminal responsibility than that related to state dependent factors (Kihlstrom et al., 1993; Porter et al., in press). Nevertheless, and notwithstanding the potential for malingering, the offender's experience of memory disturbance associated with his or her crime warrants further attention.

In summary, memory, in general terms, is an unreliable record of an event. The reliability of memory may be further compromised by the processes used to access it and is especially vulnerable to failure when associated with highly emotionally arousing events. Under these circumstances, the memory and the narrative of the event may be stored separately or they may become

so entwined that the event can not be recalled without a recreation of the emotion with which it is associated. In some circumstances, the individual may experience a dissociative state, resulting in a fragmentation their perceptual processes and thus placing aspects of the memory beyond the reach of consciousness. These vagaries of memory and the potential to dissociate from the self and/or the memory are within the continuum of normal human behaviour.

TRAUMA AS AN ANTECEDENT TO OFFENDING

In an early work by Wilson and Zigelbaum (1986), the thesis was tendered that a criminal act may occur while the offender is acting in a state induced by earlier traumatic experiences. They referred to this as "survivor mode" and identified the following characteristic features of a person seeking to cope with a PTSD: altered states of consciousness; hyperalertness; hypervigilance; excessive autonomic nervous system arousal; frenetic behaviour; paranoid features; and mistrust. Wilson and Zigelbaum (1986) observed that an individual might oscillate between normal personality processes and the survivor mode. This 'survivor mode' is relevant to offence behaviour. Dissociative states may occur as a reaction to an initial trauma or as a response to stimuli with which that trauma may be associated. Research has demonstrated that self control may be diminished during a dissociative state (Kihlstrom, Tataryn, & Hoyt, 1993). Where dissociation occurs at the commission of an offence, the issue of criminal responsibility becomes pertinent. Dissociation at the time of the offending behaviour may be manifest through dissociative amnesia for the crime (Porter et al., in press). Reports by the accused of amnesia for the offence should raise the question of potential dissociation at the time the offending took place (McSherry, 1998). Research and judicial outcomes related to 'automatism' are of relevance and the reader is referred to McSherry (1998) for further discussion. However the key issue is the evidence of a dissociative state during the commission of a violent crime, for which the offender may or may not have amnesia.

One of the more extreme dissociative conditions is Dissociative Identity Disorder (DSM IV), formerly referred to as Multiple Personality Disorder. There is consensus that the most common cause of the disorder is extreme physical and/or sexual abuse (Ross, 1997) during the individual's childhood. Cornelia Wilbur, the psychiatrist in the famous 'Sybil' case, has suggested that although female

sufferers of Dissociative Identity Disorder find their way into the mental health system, males with the disorder end up in corrections (cited by Carlisle, 1991). The point is illustrated by Lewis et al., (1997) who reported objective evidence of early childhood abuse and a subsequent Dissociative Identity Disorder diagnosis in 12 convicted murderers. The authors established clear criteria by which to differentiate disordered offenders from malingers. Lewis et al., (1997) observed that most patients with Dissociative Identity Disorder have 'aggressive, protector personality states' but that few act violently. However, the authors highlight that the diagnosis is far more common in women than men and that women are a far less violent group than men generally. Further to this, the authors noted that 64% of their male non-offender client group diagnosed with Dissociative Identity Disorder demonstrated rageful behaviours that stopped just short of homicide. In a forensic group, Lewis et al., (1997) suspect that a sizable number of violent males are labelled 'sociopaths' when indeed a dissociative condition may have been implicated in their behaviour.

Anger has relevance for the more recognized condition of post traumatic stress disorder (PTSD). Included in the diagnostic criteria for PTSD is evidence of 'irritability or outbursts of anger'. Aggression amongst sufferers of PTSD can range from mild to severe and while violent behaviour is not a specific criterion for PTSD diagnosis, the implication is that those who do have PTSD may be at risk of acting violently (Collins & Bailey, 1990; Black et al., 1997). Much of the research into the association of violent behaviour with PTSD has focused on the offences of war veterans, principally Vietnam War veterans (Escobar et al., 1983; Wilson and Zigelbaum, 1983; Yager et al., 1984; Chemtob et al., 1997) with results confirming an association between combat related stress and later violent acts (Collins & Bailey, 1990). However, this association has been demonstrated with offenders whose PTSD diagnosis is not a consequence of combat related trauma. Further to this, Kaplan et al., (1998) have demonstrated a relationship between dissociation and aggression, such that patients in her sample who scored higher on the Dissociative Experiences Scale also reported more assaultive behaviour, irritability and negativism.

Collins and Baily (1990) used a sample of 1140 US male prisoners to investigate the relationship of PTSD and its symptoms to several indicators of violence. They also assessed whether the PTSD symptoms occurred prior to or after involvement in

violence and controlled for the influence of Antisocial Personality Disorder, which has been demonstrated to be a covariant with PTSD. Collins and Bailey (1990) reported a number of significant results. First, the prevalence of the type of symptoms used to diagnose PTSD was 25%, which is 10% higher than some estimates for the general population (see Helzer et al., 1987). This tends to suggest that the offenders are more likely to experience some or all of the symptoms of PTSD when compared with non-offenders. Secondly, when the authors examined the nature of the offence and compared this with the extent of PTSD symptomology, they found that, with the exception of robbery, PTSD symptoms were significantly related to serious violence. Lastly, Collins and Bailey (1990) found that among those that reported PTSD symptomology, 85% experienced their symptoms prior to their arrest. This result lends some support to the view that PTSD has some causal relevance to violent behaviour.

The issue is best illustrated by an Australasian case example reported by Taylor (1997a). In the homicide case of *R v Campbell* (1996, Napier High Court), the defense of provocation was evaluated where a 20 year old man experienced a 'flashback' at the time of the homicide to the memory of multiple sexual abuse occurring when he was about 7 years old. The accused was found to satisfy the criteria for PTSD as defined by the DSM IV and the defense of provocation hinged on similarities between the behaviour of the perpetrator and that of the deceased. For PTSD to contribute to the defense it had to be proven that the original trauma had in fact occurred, that subsequent to the trauma the accused developed psychiatric symptoms and that a link could be established with the subsequent crime (Sparr and Atkinson, 1986). In the case reported by Taylor (1997a), the accused, who knew the deceased, was invited into the deceased's home for a cup of coffee prior to the deceased providing the accused a lift home.

"There he (the accused) crouched down to stoke a smouldering fire, and as he did so he felt a hand slide across his thigh from behind. At this point he turned, and caught a look in the eyes and smile on the face of the older man that took him straight back 12 or 13 years to his earlier abuser and to the caravan in which it occurred. The two men and the two situations fused, and he reacted violently as a seven year old boy with the physique now of a 20 year old man. At first he used a poker, then his fists, and then a kindling axe to resist what he perceived was the repetition of the sexual

abuse, before leaving his victim fatally injured and taking off aimlessly in the car..." (Taylor, 1997a, pp. 6 – 7).

In this case the original abuser was located, confessed and gave evidence at the trial under subpoena. He acknowledged, in court, abusing the accused when the accused was about 7 years old. Taylor, (1997a) reported that the original abuser agreed with defense counsel that: 1) he was similar to the deceased in appearance; 2) there was a similarity between the physical environment in which the original abuse and the homicide took place; 3) his sexual approach was similar to the behaviour reported to have been undertaken by the deceased; 4) he had used threats and intimidation to prevent the accused from disclosing the abuse when the accused was a child. The jury in this case found the accused not guilty of murder but guilty of manslaughter, for which a sentence of five years imprisonment was imposed and which was to be returned to the Court of Appeal to rule as to whether, at the time of the killing, the accused was responsible for his behaviour.

The case cited by Taylor (1997a) related to the confluence of critical stimuli which re-ignited a memory and associated emotion from a long time ago. Sometimes, however, the trauma precipitating the dissociative state is 'on-going' and the critical event best described as "the straw that broke the camels back". A study by Scott and Stradling (1994) coined the term 'Prolonged Duress Stress Disorder' which differs from PTSD in that the onset of symptoms is a result of cumulative traumatic experiences as opposed to a single or definable set of events. This model may be useful in understanding the "battered women" phenomenon and the development of PTSD symptomology in women who subsequently kill their abusing partners. A possible example of such an offence is the famous Falconer case (*R v Falconer*, 1990). Mary Falconer shot and killed her estranged husband in 1988 following years of physical, sexual and psychological abuse. The 'straw that broke the camel's back' was his implied involvement in the sexual abuse of a child formerly under their care and of his own daughters. Under intense verbal provocation, Falconer apparently dissociated and shot her husband. Voir dire at the initial trial ruled psychiatric evidence of dissociative amnesia for the killing for the purpose of developing an automatism defense as inadmissible and Falconer was convicted of willful murder. A subsequent appeal was upheld on the grounds that the psychiatric evidence should have been made available to the jury. While the

prosecution settled for a guilty plea of manslaughter and the case did not go to retrial, this case provides an example of the potential impact of trauma as an antecedent to offending.

In this section I have sought to establish that pre-existing PTSD or trauma may be a contributing factor to violent offences. The scientific literature has established dissociative behaviours specifically and PTSD symptomology in general as a normal response to abnormal experiences. Grabe (1999) has demonstrated that the dissociability of an individual is more likely to be caused by environmental factors than genetic predisposition such that under the same circumstances any individual might develop a tendency to dissociate. Thus such conditions may not be manifestly an infirmity of the person. Furthermore, there have been significant advances in the treatment of such conditions and it is likely that, for some offenders, treatment as opposed to further traumatization through lengthy incarceration, is an appropriate objective. However, there are difficulties associated with the imposition of treatment upon persons acquitted and as Febbo and his colleagues (1993) observe, "in relation to dissociation, it is probably apt for the courts to categorize individuals vulnerable to recurrent episodes of dissociation as being mentally ill".

TRAUMA AS A CONSEQUENCE OF OFFENDING

What is the importance of trauma as a consequence of offending? The clinical manifestation, as discussed above, may be dissociative amnesia. The relevance, at least from a legal perspective, relates to competency to stand trial. If the individual is to contribute meaningfully to their defense, then their ability to recall the events for which they are accused seems crucial. However, the potential for malingering remains a critical obstacle in determining competency on the basis of memory (Porter et al., in press; McSherry, 1998; Melton et al., 1997), notwithstanding the logic of the concept. For a detailed analysis on the detection of deception the reader is referred to the work of Vrij (1999), Memon, Vrij and Bull (1998) and Gudjonsson (1992). However Schacter's (1986a) observation that there is little evidence that genuine and simulated amnesia can be reliably differentiated in criminal cases remains substantially true. It is likely that the utility of dissociative amnesia in defense proceedings will be determined on a case by case basis (Porter et al., 1999).

The incidence of PTSD, on the other hand, is less encumbered by the demand characteristics of the adversarial trial process. The study of Collins and Bailey (1990) cited above examined symptoms included in the diagnosis of PTSD rather than necessarily a formal diagnosis of the disorder *per se*. While there is a value in conceptualizing of PTSD from the perspective of a continuum of pathology, which enables a broader analysis of the relationship between PTSD symptoms and other variables, a categorical (diagnostic) approach is more conventional. From this perspective, the incidence of a PTSD diagnosis among violent offenders is no less impressive. Some estimates suggest that the prevalence rate for PTSD among violent offenders is as high as 32% (Steiner et al., 1997). However, estimates such as this have been associated with the experience of PTSD *following* the violent act.

PTSD which occurs after the commission of violence may be related to the violent act itself. Kruppa (1991) reported a case study of a murderer who experienced intrusive images and flashbacks to the killing, suggesting that behavioural loss of control may have rendered the perpetrator susceptible to the development of PTSD symptoms. While it might seem bizarre to suggest that a perpetrator could be traumatized by their offending behaviour, none-the-less the DSM IV diagnostic criteria enable such a scenario. In her paper, Kruppa (1991) suggested that the lack of perceived control of one's own behaviour might render the offender susceptible to PTSD reactions and that this might be especially true of offenders whose actions take place under the influence of substances or during a psychotic episode. However, loss of control alone is insufficient to explain the onset of PTSD.

To appreciate how it is possible that an offender might be traumatized by their violent actions towards another, it is necessary to consider the subjective elements of one's appraisal of an event. This begins with the understanding of the role of 'schema' in human perception. Schema are mental frameworks which are not sharply consciously defined. Although not quite as definite, schema are similar to an 'attitudes' and they function as a kind of vague standard by which new experiences are categorized and understood (Drever, 1975). While schema are derived from past experience and thus evolve as the individual incorporates new experiences into their mental set, schema become more resistant to change as an individual ages and are unlikely to be modified by a single experience or event.

Meichenbaum (1996), who uses a schema-based model of trauma, has developed a 'constructive narrative approach' in his conceptualization of PTSD. This approach examines the meanings that an individual ascribes to an event through their accounts or 'narrative stories' of the event (Pollock, 1999). If an event violates the basic beliefs or schema that one holds for themselves or the world, then an event is liable to be experienced as traumatic. Such a conceptualization enables us to understand not only how the perpetrator of a violent offence might experience a trauma reaction to their own behavior, but also how different non-offending individuals (such as witnesses and victims) involved in the same (traumatic) experience will differ in the extent to which they suffer post traumatic stress.

Meichenbaum's (1996) constructive narrative approach proposes that those who develop PTSD hold narratives for the event that define it in a characterological fashion. These narratives typically include beliefs that the event was unforeseeable (such an event should have been anticipated) and/or uncontrollable (it should have been possible to intervene to change the outcome). The individual usually sees themselves as culpable and blame worthy, reflecting on whether they could have or should have behaved differently (Pollock, 1999). Implied in a framework such as this is the supposition that certain 'types' of people are more or less likely to hold a given schema and use predictable narratives which result in a propensity for the development of PTSD. These 'types' are generally described by psychologists as personality dispositions.

How does this model relate specifically to the offender? If an assault violates the offender's schematic model of themselves, then the potential exists for their own behaviour to be seen as personally traumatic. This might occur if the act was unplanned and thus perceived as unforeseeable or if it involved a significant loss of behavioural control and thus was subsequently evaluated as uncontrollable. Under such circumstances it is likely that the offender would see themselves as culpable and blameworthy.

The personality dimensions which are relevant to offence related appraisals, at least with respect to crimes against the person, have been the subject of extensive investigation. One of the early personality conceptualizations was that of Undercontrol and Overcontrol (Megargee, 1966). Megargee proposed that anger mediated violence occurs when the stimuli which promote anger exceeds the

individuals level of control over their aggressive feelings or impulses. He referred to the undercontrolled and the overcontrolled person. The undercontrolled person, having few inhibitors to violence, will frequently act out upon little provocation while the overcontrolled person, having very strong inhibitors to violence, requires intense or prolonged provocation in order to act violently.

Using the undercontrolled/overcontrolled typology as a template, Blackburn (1993, 1996) has analyzed the self-report data of offenders to delineate a personality typology for violent offenders. Blackburn refers to two undercontrolled types, the primary psychopath and the secondary psychopath, and two overcontrolled types, the controlled and the inhibited. It is the features of these typologies which suggests an explanation for the occurrence of trauma response to the offender's crime. Blackburn's types are defined by four dimensions (see figure 1). At the extreme of one dimension, 'psychopathy/belligerence', lay the personality traits of impulsivity, suspiciousness, a propensity for aggressive or coercive behaviour, hostility and criminality. At the opposite end of this dimension is 'control and conformity' (Pollock, 1999).

The second personality dimension is characterized, at one extreme, by social withdrawal, reflecting the tendency to be avoidant, submissive and to experience negative affective states. A high level of sociability defines the other extreme of this dimension. The remaining two dimensions are 'neuroticism', generally characterized by anxiety, apprehension and depression, versus stability, and 'extroversion' (outer-directedness) and introversion (inner-directedness).

The four personality types lay at the extreme of these dimensions and in most circumstances people lie somewhere on the continuum rather than characteristically at an extreme. Nonetheless, these four personality types have been used to predict differing vulnerabilities to the development of PTSD. Pollock (1999) used Blackburn's typology to examine the relationship between personality type and the incidence of PTSD in a sample of 80 murderers, (20 in each of the four typologies). Pollock controlled for the origin of the trauma, the nature of the violence (planned/unplanned) and a range of demographic and criminal variables. His results were quite clear: PTSD symptoms were likely to be developed in response to the murder by the controlled and inhibited personality types who reported a lesser history of offending. Pollock suggests that for these two overcontrolled groups,

Meichenbaum's proposal regarding uncontrollability and unpredictability serves as an explanation for the incidence of PTSD given that both personality types are characterized by control and social conformity and that their violence was reactive rather than planned.

Pollock reported additional useful data in understanding the relationship between offending

and trauma symptomology. He observed that in his sample secondary psychopaths reported the highest levels of PTSD symptomology but that this group was more likely to have developed PTSD in response to prior histories of traumata, suggesting that their offending may have been facilitated by their pre-existing PTSD symptoms, as discussed earlier in this paper. The primary psychopaths, on the other hand, differed from all three other groups

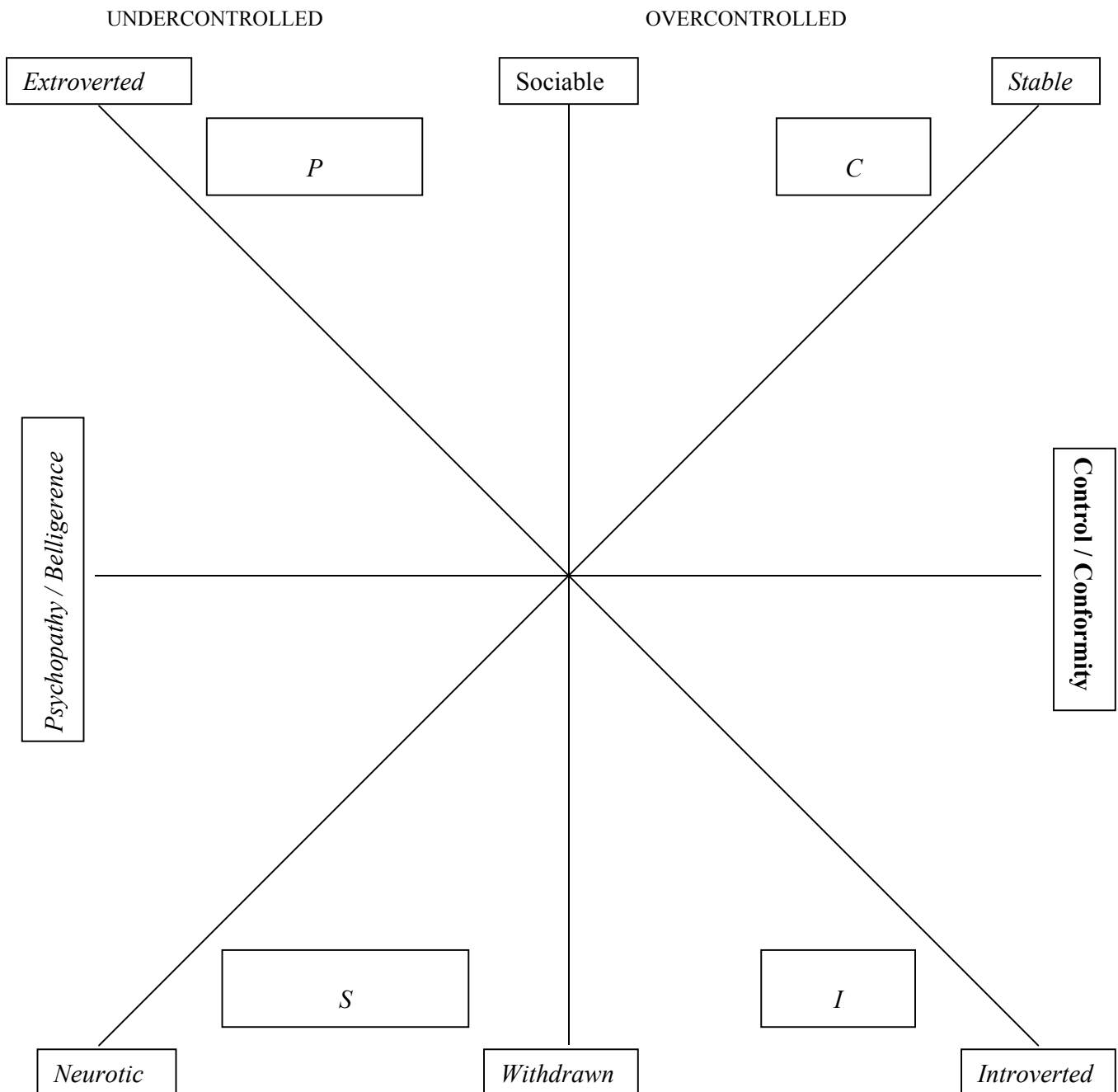


Figure 1. Blackburn's (1993) Personality Typology of Violent Offenders

in that irrespective of their past trauma experiences they exhibited significantly less PTSD symptomology.

Another distinction reported by Pollock (1999) between PTSD prone overcontrolled offenders and their undercontrolled counterparts lay in the nature of the violent behaviour. Cornell and his colleagues (1996) distinguish between two types of violence. The first, *instrumental violence*, is described as planned, goal directed, lacking provocation, typically involving a victim unknown to the offender and accompanied by little emotional arousal in the offender. The second types of violence is *reactive violence*, where planning or goals for the violence are absent, except for the expression of angry arousal. Reactive violence usually involves a victim known to the offender and there is evidence of a degree of provocation from the victim. Pollock (1999) applied the Cornell et al., (1996) classification to the crimes of his offender sample and found that the primary psychopaths were significantly more likely to engage in instrumental violence, whereas the overcontrolled groups typically acted in anger; spontaneously and uncharacteristically. Pollock observed that reactive violence carries the features described by Meichenbaum (1996) as likely to be associated with a PTSD response: it is unpredictable and uncontrollable.

Thus we have an interactive model to describe which offenders may develop PTSD as a result of their offence and why. The nature of the offence, the personality typology and the impact of past traumatization influence the offender's response to their own actions. However, Kruppa (1991) observes that a question, an ethical question, then follows: does one treat the PTSD symptoms resulting from a profoundly antisocial act, or is it 'only fair' that the perpetrator be reminded of the horror of their behaviour and, hopefully, use this as an anchor to resist further episodes of violence? While the potential exists for the phenomenological experience of PTSD to dissuade further offending behaviour, we have also seen that PTSD can act as an antecedent to violence through the elevation of levels of irritability and anger. Kruppa (1991) observes that PTSD is a valid target for intervention not only when its amelioration enhances the offender's rehabilitative prospects, but also when the symptoms are clinically assessed to be life-threatening. While the clinician should provide treatment free of moral judgments, the impact of offender traumatization may raise different issues for the legal representative of the offender, such as placement in a facility which supports treatment.

WOMEN: A SPECIAL CASE?

Collins and Bailey (1990), who have provided some evidence of a causal relationship between PTSD and violence, have referred to the "intergenerational transmission of violence", suggesting that childhood victimization may result in the development of PTSD which then becomes expressed in violence within the victims own family. Clearly the evidence of significant histories of victimization amongst female incarcerates and the incidence of psychopathology lends some support to this contention. Pollock (1997) cites studies where such experiences are seen as "contributory factors in the development of extreme violent behaviour" and in female criminality specifically.

The high incidence of abuse histories amongst female offenders (Browne et al., 1999; Krieg, 1999; Morash et al., 1998; Disability Action Inc., 1997; Caddle & Crisp, 1996; Raeside, 1994) and the strong association identified between early abuse and the development of PTSD in the generic literature (McFarlane, 1989) enables us to suggest, by extrapolation, that PTSD may have a particular antecedent relevance to female offending. For example, the symptoms of PTSD include distressing emotional, physiological and perceptual/cognitive experiences. These symptoms elicit coping behaviours that, more often than not, involve the use of alcohol or other drugs. Offending behaviour may be either a direct consequence of the PTSD (e.g. emotional volatility and hyper arousal) or linked to either the use of a substance or the need to acquire funds to purchase the substance (Raeside, 1994).

The incidence of adult abuse histories is also significant. For example, Fletcher, Rolison and Moon, (1993) observed that 69% of their sample reported recent abuse as an adult, including both physical and sexual assaults. More recently Browne and her colleagues (1999) have observed that one particular after-effect of sexual molestation as a child consistently reported in the literature is later involvement with violent intimates. The authors reported that the lifetime prevalence rates for severe violence was greater for female offenders than the lifetime prevalence rates for all acts of physical abuse reported by women in the general female population. The abuse experiences of women, both in childhood and as adults, and the psychological and psychiatric sequelae that follow, including substance abuse, place into context the true nature of the majority of female offending. Singer et al., (1995) observe that "the crimes these women

commit are often a reaction to negative life events, a response to crisis or prolonged disadvantage”.

Cauffman et al., (1998) delineate several clinical implications related to the high incidence of PTSD among female offenders. Chief amongst these is the potential for the condition to remain undiagnosed, potentially resulting in a mismatch of the offender's needs and her placement and rehabilitative options post trial. The authors highlight the particular challenges presented by a diagnosis of PTSD and the need for treatment services to accommodate for these needs. Whether prison is an effective or appropriate site for such services to be developed is an important issue for debate.

CONCLUSION

PTSD and dissociative states present a conundrum. There are, without doubt, numerous cases where the disorders have legitimate relevance to criminal responsibility and/or competency to stand trial. However, as Sparr (1996) observes, the diagnosis revolves around self-report and as such distortion for the avoidance of criminal punishment is an ongoing concern. Furthermore, the existence of PTSD and dissociative experiences do not in themselves constitute a rational defense: there must be a causal relationship established between the criminal behaviour and the trauma symptomology. Sparr (1996) suggests that the following factors related to the crime will facilitate a determination of the authenticity of a PTSD claim:

- The crime should be out of character for the offender, spontaneous and unpremeditated;
- The choice of victim may be fortuitous or accidental;
- There should be some psychologically meaningful way in which the crime and the traumatic stressor are connected;
- The accused is essentially unaware of how the crime and the traumatic stressor are connected;
- Bouts of violence follow seemingly benign incidents;
- There may be amnesia for all or part of the crime;
- It may be difficult to explain the reason for the behaviour;
- The accused may have no previous criminal record;
- The crime is precipitated by events which can be seen to have forced the accused to face unresolved conflicts (in relation to the pre-existing trauma);
- The behaviour lacks current motivation;

- Coherent dialogue appropriately related to time and place are not found in dissociative states.

Sparr's (1996) suggestions should not be interpreted as prescriptive but rather as indicative. A more comprehensive approach to the reduction of uncertainty in cases involving PTSD and dissociative experiences would involve a thorough criminogenic needs assessment, informed by the conventional understanding of the detection of deception and reflecting the generally observed features of previous automatism cases.

REFERENCES

- Abbott, T.M. (2000). An Investigation of the *Antisocial Attitudes Construct*. Unpublished Master's thesis, Carleton University, Ottawa, Ontario, Canada.
- Ajzen, I., & Madden, T.J. (1986). Prediction of goal-directed behavior: Attitudes, intentions and perceived behavioural control. *Journal of Experimental Social Psychology*, 22, 453-473.
- Alaird, L.F., Burton, V.S., & Cullen, F.T. (2000). Gender and crime among felony offenders: Assessing the generality of social control and differential association. *Journal of Research in Crime and Delinquency*, 37, 171-199.
- Andrews, D.A. (1985). *Notes on a battery of paper-and-pencil instruments: Part 1: Assessments of Attitudes and Personality in Corrections*. Ottawa, Canada: Ministry of Correctional Services of Canada and Carleton University.
- Andrews, D.A., & Bonta, J. (1998). *The psychology of criminal conduct* (2nd ed.). Cincinnati, OH: Anderson Publishing co.
- Andrews, D.A., & Wormith, J.S. (1984). *The Criminal Sentiments Scale*. Ottawa, Canada: Ministry of Correctional Services of Canada.
- Arbuthnot, J., & Gordon, D.A. (1988). Crime and cognition: community applications of sociomoral reasoning development. *Criminal Justice and Behavior*, 15(3), 379-393.
- Basinger, K.S., Gibbs, J.C., & Fuller, D. (1995). Context and the measurement of moral judgement. *International Journal of Behavioral Development*, 18, 537-556.

- Blackburn, R. (1993). *The psychology of criminal conduct: Theory, research and practice*. Chichester, United Kingdom: John Wiley.
- Blassi, A. (1980). Bridging moral cognition and moral action: A critical review of the literature. *Psychological Bulletin*, 88, 1-45.
- Colby, A., Kohlberg, L. (1987). *The measurement of moral judgement: Theoretical foundations and research validation* (Vol. 1.). Cambridge, England: Cambridge University press.
- Dowden, C. & Andrews, D.A. (1999). What works for female offenders: A meta-analytical review. *Crime and Delinquency*, 45, 438-452.
- Gendreau, P., Little, T., & Goggin, C. (1996). A meta-analysis of the predictors of adult offender recidivism: What works. *Criminology*, 34, 575-595.
- Gibbs, J.C., Basinger, K.S., Fuller, D. (1992). *Moral maturity: Measuring the development of sociomoral reflection*. Hillsdale, NJ: Erlbaum.
- Goldstein, A.P., Glick, B., & Gibbs, J.C. (1998). *Aggression Replacement Training: A Comprehensive Intervention for Aggressive Youth* (Rev ed.). Champaign, IL: Research Press.
- Griffore, R.J., & Samuels, D.D. (1978). Moral judgement of residents of a maximum-security correctional facility. *The Journal of Psychology*, 100, 3-7.
- Howells, K., Watt, B., Hall, G., & Baldwin, S. (1997). Developing programs for violent offenders. *Legal and Criminological Psychology*, 2, 117-128.
- Jennings, W.S., Kilkeny, R., & Kohlberg, L. (1983). Moral-development theory and practice for youthful and adult offenders. In W.S. Laufer, & J.M. Day (Eds.), *Personality Theory, Moral Development, and Criminal Behaviour*. (pp.281-355). Toronto: Lexington Books.
- Kohlberg, L. (1984). *The psychology of moral development*. New York: Harper and Row.
- Martinson, R. (1974). What works? Questions and answers about prison reform. *The Public Interest*, 35, 22-54.
- McGuire, J. (Ed.). (1995). *What works: Reducing reoffending: Guidelines from research and practice*. West Sussex, England: Wiley.
- Mears, D.P., Ploeger, M., & Warr, M. (1998). Explaining the gender gap in delinquency: Peer influence and moral evaluations of behavior. *Journal of Research in Crime and Delinquency*, 35, 251-266.
- Mukherjee, S., & Graycar, A. (1997). *Crime and Justice in Australia* (2nd ed.). Sydney: Hawkins Press.
- Nelson, R.J., Smith, D.J., & Dodd, J. (1990). The moral reasoning of juvenile delinquents: A meta-analysis. *Journal of Abnormal Child Psychology*, 18, 231-239.
- Palmer, E.J., & Hollin, C.R. (1998). A comparison of moral development in young offenders and non-offenders. *Legal and Criminological Psychology*, 3, 225-235.
- Palmer, E.J., & Hollin, C.R. (1997). The influence of own parenting on sociomoral reasoning, attributions for criminal behaviour, and self-reported delinquency. *Personality and Individual Differences*, 23, 193-197.
- Reckless, W.C. (1940). *Criminal behaviour*. New York: McGraw Hill.
- Shaughnessy, J.J., & Zechmeister, E.B. (1997). *Research Methods in Psychology* (4th ed.). New York: McGraw-Hill.
- Simourd, D.J. (1996). Criminal attitudes: The silent partner in crime. In B. Wolfe, (Ed.), *Proceedings of the Sixth Symposium on Violence and Aggression. Saskatchewan Canada*: University of Saskatoon, askatchewan, Extension Press.
- Simourd, D.J. (1999). *The Anti-Social Behaviour Scale*. Ontario, Canada: Collins Bay Institute.
- Thornton, D., & Reid, R.L. (1982). Moral reasoning and type of criminal offence. *British Journal of Social Psychology*, 21, 231-238.
- Title, C.R., Burke, M., & Jackson, H. (1986). Modelling Sutherland's theory of differential association: Toward an empirical clarification. *Social Forces*, 65, 405-432.

Byrne, M.K.

Valliant, P.M., Gauthier, T., Pottier, D., & Kosmyna, R. (2000). Moral reasoning, interpersonal skills, and cognition of rapists, child molesters, and incest offenders. *Psychological Reports, 86*, 67-75.

Vitaro, F., Brendgen, M., & Tremblay, R.E. (2000). Influence of deviant friends: Searching for moderator variables. *Journal of Abnormal Child Psychology, 28*, 313-325.

Ward, A., & Dockerill, J. (1999). The predictive accuracy of the Violent Offender Treatment Program Risk Assessment Scale. *Criminal Justice and Behavior, 26*, 125-140.

Wortley, R. (1986). Neutralising moral constraint. *Australian and New Zealand Journal of Criminology, 19*, 251-258.