Psychopathy, Impulsiveness and Violence: How are they linked?
Richard C. Howard
Institute of Mental Health, Nottingham, UK

Abstract
This paper attempts to elucidate possible relationships between three multifaceted constructs: psychopathy, impulsiveness and violence. A recently developed and validated quadripartite violence typology is described which parses violence into two motivationally distinct types according to whether it is appetitively or averesively driven. Nested within each type are 2 sub-types which depend on whether the violence is impulsive or premeditated/controlled. An attempt is then made to link each type and subtype of violence with, firstly, psychopathy as viewed through the prism of the Triarchic Psychopathy Model (TPM) which parses psychopathy into the three phenotypic components of Meanness, Boldness and Disinhibition; and secondly, impulsiveness parsed using the UPPS model into Urgency, (lack of) Perseverance, (lack of) Premeditation, and Sensation seeking. It is suggested that violence that is appetitively driven and controlled/premeditated (motivated by a desire for self-gratification) is related to Boldness; that violence that is appetitively driven and impulsive (motivated by a desire for excitement) is related to the combination of Boldness and Meanness; and that violence that is averesively driven and impulsive (motivated by a desire to protect oneself from a perceived and immediate threat) is related to the combination of Meanness and Disinhibition. It remains unclear whether, or how, the fourth violence type motivated by a desire for vengeance relates to the triarchic psychopathy components. While the suggested relationships are hypothetical, they provide a platform for empirical verification in future studies.

INTRODUCTION
The present article aims to explore interrelationships between three partially overlapping and multifaceted constructs: psychopathy, impulsiveness and violence. Until recently, violence research has lacked a typology that does justice to the motivational heterogeneity of violent acts committed by mentally disordered offenders. The recently developed quadripartite violence typology (QVT), outlined in section 1, attempts to redress this lack. It offers a more nuanced dissection of the violence construct that enables, for the first time, links to be made between motivationally distinct types of violence and both impulsiveness, decomposed into its various facets (Urgency, lack of Perseverance, lack of Premeditation, Sensation Seeking) [1] and psychopathy. The latter, discussed in section 2, is viewed through the lens of the triarchic psychopathy model (TPM) as a particular constellation of interpersonally aversive traits within the overlapping phenotypic domains of Boldness, Meanness and Disinhibition [2]. These domains and their suggested relations to different facets of impulsiveness (further discussed in section 3) and the types of violence included in QVT are illustrated schematically in Figure 1.
1. The Quadripartite Violence Typology

Violence is a complex and heterogeneous construct that varies with regard to victims, severity, frequency and context, and is recognised to comprise distinct types. Traditional typologies of aggression distinguish between proactive/instrumental vs. reactive and impulsive vs. premeditated. Although often used interchangeably, these represent overlapping but distinct constructs that are conceptually and empirically distinct and may have different aetiologies [3]. A recently developed typology, the quadripartite violence typology (QVT) was in large part driven by the inability of traditional typologies to accommodate some forms of violence, in particular appetitive violence [4]. The validity of the quadripartite typology has been verified in regard to the unique functions entailed by each type of violence [5], its behavioral correlates in antisocial youth [6], and the motivations for online aggressive behavior ("cyberbullying") [7]. QVT has been further validated in a study of Australian youth who had been convicted of a violent offence [8]. QVT allowed for adequate classification, in an uncomplicated manner, of all violent offences and proved superior to the traditional reactive vs. instrumental classification. A limitation of these validation studies is that they are restricted to youth samples; further validation of QVT is required using samples of adult offenders.

According to QVT, an act of violence may be either appetitively or aversively motivated, and within each of these categories may be either impulsive or premeditated. This yields the 2x2 matrix shown in Figure 2. It should be noted that the traditional distinction between instrumental and reactive violence is retained in this typology, where instrumental violence is represented in the lower left quadrant in Figure 2, and reactive violence is represented in the top right quadrant.

![Figure 2. The quadripartite violence typology (QVT).](image)

An important distinction has been drawn between the intent of the act (to inflict harm on another individual, which is common to all types of violence) and the motive or terminal value, which serves as the incentive for the act [9]. According to QVT, the terminal value in appetitive/impulsive violence is a desire for excitement and exhilaration; in aversive/impulsive violence it is a desire to protect oneself from some directly perceived interpersonal threat, physical or psychological; in appetitive/controlled violence, it is self-gratification through acquisition of material goods or social dominance; in aversive/controlled violence the incentive is a desire to achieve retribution for a perceived injury or wrong. In the case of appetitive/controlled and appetitive/impulsive violence, the motivation is intrinsic, deriving in the former case from anticipated feelings of satisfaction at the prospect of righting a perceived wrong; in the latter case from anticipated feelings of excitement deriving from the violent act. In the case of aversive/impulsive and appetitive/controlled violence, the motivation is extrinsic, derived in the former case from the anticipated removal of a physically present threat, in the latter case from the anticipated acquisition of some material gain or social dominance.

![Figure 2. The quadripartite violence typology (QVT).](image)

Emotional dysregulation is a core feature of QVT, in so far as it sees all four subtypes of violence as arising from dysregulated affect and emotions. Both appetitive subtypes involve an excess of positive emotions – a surfeit of excitement in the case of the appetitive/impulsive subtype, of greed or lust in the case of the appetitive/controlled subtype. Likewise both aversive subtypes involve an excess of negative emotions – a surfeit of fear and distress in the case of the aversive/impulsive subtype, and of vengeful feelings in the case of the aversive/controlled subtype. The expression of anger has been identified as a function of violence that is common to both averesively motivated types of violence [5].

2. Psychopathy

Development of the Psychopathy Checklist (PCL) by Hare [10], originally based on the classical criteria for psychopathy derived by Cleckley [11] from his case studies, has undoubtedly spurred much research since its development in the 1980s. However, the PCL conceptualisation of psychopathy is unsatisfactory, on several counts. First, it comprises an unhelpful mixture of traits (e.g. grandiosity, selfishness) and behaviors (e.g. antisocial, irresponsible and parasitic lifestyle), thereby confounding the behaviors that we wish to explain (crime and violence) with the variables (traits) that might explain such behaviors. Evidence reviewed in [12] suggests that violence is associated with proximal contextual factors (e.g. use of alcohol, particularly in public spaces such as the street or bars) operating in concert with distal personality factors such as psychopathic traits, emotional impulsiveness and delusional thinking [12].

Second, development and validation of the PCL in criminal samples resulted in its items being biased in favor of disinhibitory psychopathology and in conceptual drift away from the Cleckleyan prototype [13,14]. Recent quantitative analysis of the key traits that characterised Cleckley’s cases has confirmed "...that the Cleckley psychopaths were often bold and fearless, as well as exploitative, charming, dishonest, self-centred, remorseless and shallow" [15]. Moreover, despite the link between a high PCL score and criminality, which is inevitable due to several of its items indexing criminal behaviour, Cleckley’s psychopaths were not found to be characterised by extreme forms of antisocial behavior, and in particular by violence. Rather, their criminal behavior was "petty and poorly planned…. They were not particularly cruel, callous or physically aggressive.... " [15]. Since
the PCL, particularly scores on its second factor (Factor 2) that represents deviant and disinhibited behavior from a young age, has consistently been found to be associated with violence and violent recidivism [16], this again illustrates the conceptual drift away from Cleckley's prototypical psychopath that has occurred in the PCL operationalisation and conceptualisation of psychopathy.

In parallel with development of the PCL and its derivatives, a separate tradition of psychopathy research has focused on psychopathy as a personality construct [14], viewing psychopaths as individuals who score very high on normally distributed personality traits or dimensions. Starting in the 1970s, Blackburn developed a questionnaire typology of mentally disordered offenders according to which psychopathy reflected a higher-order dimension variously labelled "psychopathy", "belligerence" [17] or "hostile impulsivity" (hostility, aggression and non-compliance versus self-control and conformity). This higher-order dimension was found, in personality disordered offenders, to be orthogonal to a dimension labelled social anxiety which discriminated "primary" (sociable, non-anxious) from "secondary" (socially withdrawn, anxious) psychopaths. Further self-report measures of psychopathy have since been developed such as the Psychopathic Personality Inventory (PPI) [18] and the Levenson Self-Report Psychopathy Scale (LSRP) [19]. A constellation of traits associated with psychopathy, in particular traits associated with low Agreeableness and low Conscientiousness, has also been described within the framework of the Five Factor Model (FFM) of normal personality [20,21].

A significant recent development within this psychometric personality tradition of psychopathy research has been the attempt by Patrick and colleagues to realign the conceptualisation and operationalisation of psychopathy with the prototypical Cleckleyan construct [22]. This triarchic conceptualisation of psychopathy parses psychopathy into three partly overlapping phenotypic components, Boldness, Meanness and Disinhibition, operationalised in the Triarchic Psychopathy Measure (TriPM). Boldness "entails proclivities towards confidence and social assertiveness, emotional resiliency, and venturesomeness" [22]. Meanness "entails deficient empathy, lack of affiliative capacity, contempt towards others, predatory exploitativeness, and empowerment through cruelty or destructiveness" [22]. Disinhibition "entails impulsiveness, weak restraint, hostility and mistrust, and difficulties in regulating emotion" [22]. Boldness has been found to correlate positively (r = .20 to .30) with Meanness but negatively (r = -.16 to -.20) with Disinhibition. In contrast, Meanness and Disinhibition have been found to correlate strongly (r = .34 to .60) with one another, and the correlation is higher in offenders (r = .60 or greater) than in non-offenders. The high degree of overlap between Meanness and Disinhibition is most likely accounted for by their common pattern of correlations with other personality variables, such as those derived from the Five Factor Model (FFM) of personality. Meanness and Disinhibition share high correlations with most facets of the FFM Agreeableness factor and with at least one facet (Dutifulness) of Conscientiousness [23]. Disinhibition is chiefly distinguishable from Meanness by virtue of its high positive correlations with all facets of Neuroticism and its higher negative correlations with facets of Conscientiousness [23]. It seems likely that a combination of high Meanness and high Disinhibition represents the extreme pole of the above-mentioned higher-order personality dimension described by Blackburn as reflecting hostility, aggression and non-compliance. Considering that Disinhibition correlates with all facets of FFM Neuroticism, including anxiety [23], it would be reasonable to suppose that those who additionally show high scores on the orthogonal dimension, Withdrawal/Social Anxiety, would score disproportionately high on Disinhibition, while those scoring low on Withdrawal would perhaps score higher on Meanness.

Whether Boldness plays a significant role in characterising psychopathy is a contentious issue. Some authors argue that it is not central to psychopathy [23,24] while others argue in favour of its centrality [25]. Boldness has consistently been found to be associated with stable extraversion, and recent findings suggest that "Boldness is, for the most part, a marker of normal, good or healthy adjustment; it generally encompasses positive attributes that diminish the likelihood of committing violence or other less-severe antisocial behavior while increasing prosocial and emotional functioning" [24]. However, these findings were obtained in a healthy student sample, and [as the authors point out] extreme presentations of bold traits, including more dysfunctional and interpersonally aversive traits such as narcissism, would likely be more prevalent in forensic samples. As we saw above, boldness, defined as "audacious, daring, courageous, venturesome", was rated as a prominent feature of Cleckley's psychopaths [15], and it is represented in the PCL-R uniquely through the latter's interpersonal facet [26]. A recent study [27] identified, among high PCL-R scoring offenders, a "primary" psychopath subtype which was distinguishable from a "secondary" type by virtue of having prominent interpersonalfeatures (glibness, grandiosity, manipulativeness, deceitfulness and egocentricity). Arguably, therefore, this "primary" type combined Boldness with Meanness, while the "secondary" type combined Meanness with Disinhibition. Moreover, distinct physiological correlates of Boldness have been described, including an association of Boldness with deficient threat vs. neutral potentiation of the startle reflex [28]. The latter finding suggests that the diminished defensive reaction to aversive stimulation, previously reported to be associated with interpersonal-affective features of psychopathy [29], is linked specifically to its interpersonal features.

In summary, the weight of evidence favours the notion that, in conjunction with Meanness and Disinhibition, Boldness is an important component of psychopathy, which "...is best construed not as a unitary construct, but as an amalgam of largely distinct attributes that combine to forge an interpersonally malignant condition" [20]. This has important implications for the question to be addressed below - how is psychopathy related to impulsiveness? - since we need to ask this question in relation to all three phenotypic components of psychopathy. One caveat must be added regarding the possible interaction of these three components. For example, Boldness and Disinhibition have been reported to show significant interactions in the prediction of certain outcomes, namely risky sexual attitudes [30] and predatory aggression [31]. Gatner and colleagues [24] did not
find Boldness x Disinhibition interactions in their associations with prosocial or negative outcomes, but they did find Meanness interacted with Disinhibition to increase their association with rule-breaking. Again, this has important implications for examining the relationship of triarchic components of psychopathy with violence, since particular sub-types of violence may be associated with different combinations of traits related to Meanness, Boldness and Disinhibition.

3. Impulsiveness

Impulsiveness can broadly be defined as a predisposition to react rapidly and without planning to internal and external stimuli with little or no regard for the short-term and long-term consequences for oneself and others. It is considered to be a symptom of many psychiatric disorders including borderline and antisocial PDs, bipolar disorder, attention deficit/hyperactivity disorder, conduct disorder and substance abuse/dependence [32]. Impulsiveness is generally recognised to be multifaceted, incorporating a number of dimensions, including a tendency to act rashly and irrespectively under the pressure of positive or negative emotions [33]. When behaving in an emotionally impulsive way, the individual responds to a stimulus or event on the basis of an immediate emotional reaction such as desire or anger, with little if any checking of long-term consequences [34]. Measures of impulsiveness, both self-report and behavioural, are limited in the degree to which they tap emotional impulsiveness. For example, a commonly used self-report measure of impulsiveness, the Barratt Impulsivity Scale (BIS) [35] does not include an explicitly emotional component. It should also be noted that behavioral measures of impulsivity obtained in a variety of laboratory tasks [36] do not correlate significantly with self-report impulsivity measures such as the UPPS measures described below.

The more recently developed "UPPS" model [1], derived from the Five Factor Model (FFM) of normal personality, conceptualises and assesses impulsivity as a multifaceted construct that includes various separable and distinct pathways to impulsive behaviour. It explicitly acknowledges an emotional facet of impulsiveness, called negative Urgency, said to reflect "a tendency to experience strong impulses, frequently under conditions of negative affect" [1]. Subsequently, UPPS was revised to include a positive Urgency scale to reflect impulsive behaviour occurring in the context of positive affect [37].

A recent meta-analytic review [38] of the psychopathological correlates of UPPS scales revealed that Negative and Positive Urgency demonstrated the strongest associations across every category of psychopathology assessed, namely: alcohol/substance abuse, depression, suicidality/non-suicidal self-injury, aggression, anxiety, borderline personality disorder, and eating disorder. Negative Urgency demonstrated the greatest correlational effect sizes across the various forms of psychopathology. Positive Urgency demonstrated a pattern of correlations similar to that of Negative Urgency, leading the authors to suggest that Positive and Negative Urgency may be "...separate but closely related “sub-processes” of a broader dimension implicating strong emotion, regardless of valence, and impulsive action in response to that emotion”[38]. From this meta-analytic review it can be concluded that emotional impulsiveness (Urgency) appears to be associated with a broad range of both internalizing and externalizing psychopathologies. With regard to personality disorders, a high level of Negative Urgency has been found to be uniquely associated with greater severity of personality disorder; indexed either by a greater co-occurrence of different types of personality disorder ("comorbidity"), or by the confluence of externalizing and internalizing features [39]. These findings suggest that Urgency, particularly Negative Urgency, may contribute importantly to a general psychopathology (p) factor associated with more life impairment, general familiality, worse developmental histories, and more compromised early-life brain function [40].

4. How is psychopathy related to impulsiveness?

Psychopaths in the Cleckleyan sense are clearly impulsive. The 15 case studies described by Cleckley [11] were uniformly rated as highly impulsive in terms of the impulsivity facet of the FFM Neuroticism scale [15]. However, the assumption that psychopaths are impulsive needs to be reconsidered [41], since, while many of their criminal acts are impulsive (as shown in Cleckley’s case studies), many of them are committed in cold blood and are premeditated. Moreover, as we have seen above, impulsiveness decomposes into at least 4 facets, so we need to ask how each of the three psychopathy phenotypes, Boldness, Meanness and Disinhibition, is related to impulsiveness as defined by the four UPPS facets.

To date only one study has explicitly addressed this question, but did so in two samples, one comprising offenders, the other students [42]. The pattern of correlations was consistent across samples, strengthening the reliability of the findings. Meanness was related to all UPPS facets and therefore showed the strongest links to impulsiveness overall. Disinhibition related to high levels of both negative and positive urgency, and to lack of premeditation. Most interestingly, with the exception of sensation seeking with which it was positively associated, Boldness was inversely associated with two of the four UPPS measures: lack of perseverance and negative urgency. Individuals scoring high on boldness therefore do not react rashly under pressure of negative emotions - rather, they remain cool under pressure, they persist in pursuit of their goals, and they seek excitement.

We are now in a position to use this information to speculate in an informed way about how the different components of psychopathy in the TPM might be related to violence seen through the lens of QVT.

5. How might different types of violence relate to UPPS impulsiveness and to the triarchic psychopathy model (TPM)?

In this final section some speculations are offered regarding how the different types of violence outlined above might relate firstly, to the UPPS impulsiveness facets and secondly, to the components of TPM (Figure 1).
First, as outlined above, both the appetitive/impulsive and aversive/impulsive subtypes shown in Figure 2 reflect violence that is not only impulsive but is emotionally driven. Both should therefore be associated first and foremost with UPPS Urgency. However, the appetitive/impulsive subtype should be more closely associated with positive Urgency, while the aversive subtype should be more closely associated with negative Urgency. Both controlled subtypes, appetitive and impulsive, might arise from a theoretical point of view to be expected to be associated with high levels of Premeditation and Perseverance, since in order to satisfy a desire for self-gratification or vengeance, both forethought and persistence would typically be required.

Regarding associations between TPM components and QVT, since Meanness is associated with all facets of impulsiveness, it might be predicted to be associated with both appetitive/impulsive and aversive/impulsive violence. However, it is suggested that aversive/impulsive violence might be differentially associated with the combination of Meanness with Disinhibition seen in both secondary psychopaths and patients with borderline personality disorder. Deficits in social cognition seen in borderline patients, for example their tendency to misinterpret neutral social situations [43], likely reflect a bias towards interpreting social encounters as threatening [44]. This negative bias would render them highly susceptible to the impulsive/aversive subtype of violence associated, in QVT, with the perception of interpersonal threat.

In contrast, appetitive/impulsive violence is likely associated with Meanness in combination with Boldness, since the latter has been found to be associated with sensation seeking [42] and risk taking [24]. The violence of those who are characterised by high levels of Boldness alone, in the absence of significant degrees of Disinhibition and Meanness, might be expected to be motivated primarily by a desire for self-gratification and control over others (Figure 2). An example of this might be the use of physically coercive strategies to obtain self-gratification recently reported in psychopathic individuals when pursuing a partner [45]. It is not clear whether, or how, the final type of violence, aversive/impulsive violence associated with the combination of high levels of Meanness with Disinhibition seen in both secondary psychopaths and patients with borderline personality disorder. Deficits in social cognition seen in borderline patients, for example their tendency to misinterpret neutral social situations [43], likely reflect a bias towards interpreting social encounters as threatening [44]. This negative bias would render them highly susceptible to the impulsive/aversive subtype of violence associated, in QVT, with the perception of interpersonal threat.

CONCLUSION

The present paper attempts to elucidate the interrelationship between psychopathy, impulsiveness and violence by decomposing them into their component parts. The proposed relationships between these multifaceted constructs will require empirical verification in studies that simultaneously measure all three constructs - psychopathy, impulsiveness and violence - using measures of the three TPM components, UPPS scales and measures of the four violence types suggested by QVT, respectively. This is a fertile field for future investigation.

DISCLOSURE

The author declares no conflicts of interest.

REFERENCES


About the Corresponding Author

Dr. Richard C. Howard

Summary of background:
The author’s longstanding and enduring interest in personality and its disorders dates back to his early work investigating neurophysiological correlates of antisocial personality in high-secure forensic patients. For this he was awarded his PhD at the Queen’s University of Belfast in 1981. Since then he has worked in a variety of academic and forensic psychiatric settings in several countries including Ireland, New Zealand, Singapore and most recently in England where he worked as part of a team of researchers on a UK Government sponsored initiative to assess and treat those offenders with “dangerous and severe personality disorder.”

Current research focus:
• Personality disorders
• Violence
• Psychopathy

Websites:
https://www.researchgate.net/profile/Richard_Howard
Permanent e-mail address: reeshah@outlook.com

Journal of Behavior

Journal of Behavior is an international, peer-reviewed journal that aims to publish scholarly papers of highest quality and significance in the field of behavior. The journal publishes original research articles, review articles, clinical reports, case studies, commentaries, editorials, and letters to the Editor.

For more information please visit us at following:
Aims and Scopes: https://www.jscimedcentral.com/Behavior/aims-scope.php
Editorial Board: https://www.jscimedcentral.com/Behavior/editors.php
Author Guidelines: https://www.jscimedcentral.com/Behavior/submitpaper.php
Submit your manuscript or e-mail your questions at behavior@jscimedcentral.com

Cite this article