RUNNING HEAD: COMPARING PCL-R AND CAPP

The usefulness of psychopathy in explaining and predicting violence: Discussing the utility of competing perspectives

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**Abstract**

The current study is a review of the utility of psychopathy in violence risk assessment. Psychopathy has long been considered one of the most important factors when assessing the risk for future violence in forensic samples. Concerns about tautology have however indicated a need to critically assess the utility of psychopathy measures in risk assessment. We argue that the focus should be as much on the psychopathic personality in the explanation of violent behavior as on the psychopathic personality in the prediction of violent behavior. The main aim of this article is to contrast and discuss the utility of two different ways of conceptualizing and measuring the psychopathic personality, namely through the PCL scales and the CAPP. Existing evidence suggests that the CAPP and PCL are comparably strong predictors of violent behavior, but the CAPP is more dynamic (compared with the static PCL) and aims to measure psychopathic personality rather than past behavior. It is proposed that the CAPP is more useful in explaining violence and should be utilized more in future risk assessments for violence. Implications for future practice are discussed.

Keywords: *Psychopathy, PCL-R, CAPP, violence, risk assessment.*

1. **Psychopathy and Violence Risk Assessment**

Currently, a common description of psychopathy is as a cluster of maladaptive personality and behavioral traits, such as interpersonal manipulation, empathy deficits, callousness, and antisocial behavior (four facet structure: interpersonal [facet 1], affective [facet 2], lifestyle [facet 3], and antisocial [facet 4], Hare, 2003). This concept is also associated with violent behavior (DeMatteo Edens & Hart 2010; Skeem & Mulvey 2001). McCuish, Corrado, Hart, & DeLisi (2015) called for psychopathy to be used more broadly as an explanatory factor for chronic violence across the life course. McCuish et al.’s (2015) argument is supported by effect sizes [Cohen’s *d*] between psychopathy and violence in the range of .47 to .93 (Blais, Solodukhin, & Forth, 2014; Edens & Campbell, 2007; Edens, Campbell, & Weir, 2007; Leistico, Salekin, DeCoster, & Rogers, 2008; Salekin, Rogers, & Sewell, 1996; Walters, 2003). The identification of psychopathic traits, and a diagnosis of psychopathy, have had implications in sentencing and parole decisions (Boccaccini, Murrie, Clark, & Cornell, 2008; Edens, Colwell, Desforges, & Fernandez, 2005; Ogloff & Lyon 1998), treatment recommendations (Chauhan, Reppucci, & Burnette, 2007; Rockett, Murrie, & Boccaccini, 2007), and decisions about diversion from the criminal justice system (Vidal & Skeem, 2007; Seagrave & Grisso, 2002). This highlights the central position of the psychopathy construct within both violence risk assessment and the criminal justice system (DeLisi, 2009; DeMatteo et al., 2010; Hare, 1998; Heilbrun, Ogloff, & Picarello, 1999; Nicholls & Petrila, 2005).

Because of the consistency and strength of the association, psychopathy has historically been included in commonly used violence risk assessment tools such as the Violence Risk Appraisal Guide (VRAG; Quinsey, Harris, Rice, & Cormier, 2006) and the HCR-20 (Webster, Douglas, Eaves, & Hart, 1997), in addition to being used separately as a predictor (Hare, 1999). There has however been some recent changes. The new version of the HCR-20 (HCR-20V3) states that personality disorders (risk factor H7a) can be identified by other measures than the traditional PCL-R approach (Douglas et al., 2014), and the VRAG-Revised has dropped the interpersonal, affective, and lifestyle traits from the risk assessment tool (Harris, Rice, Quinsey, & Cormier, 2015). These changes highlight the development of psychopathy in risk assessment, as well as raising further concerns about tautology (e.g. the VRAG-R focuses solely on the antisocial traits of psychopathy; Harris et al., 2015). Lloyd, Clark, and Forth (2010) advocate further consideration of the role of psychopathic traits in risk assessment, and the present review aims to shed further light on the relationship between psychopathy and violence.

The current review is the first to systematically compare two different models and measures of the psychopathy construct according to their utility in predicting violence, thereby answering the call of Cooke (2014). While several meta-analyses have been conducted (which will be reviewed later in this article), the new developments mentioned above, as well as the lack of focus on measures other than the PCL-R (Hare, 2003), highlight the need for a critical discussion of the role of psychopathy within risk assessment. Cooke (2014) initiated a comparison of psychopathy measures for general offending but, because of the nature of the publication (an encyclopedia entry), this was not done in much depth. We will here follow Cooke (2014) and compare the established psychopathy measure by Hare and colleagues, broadly known as the PCL-scales (e.g. Psychopathy Checklist Revised [PCL-R; Hare, 2003], Psychopathy Checklist: Screening Version [PCL:SV; Hart et al., 1995], Psychopathy Checklist: Youth Version [PCL:YV, Forth et al., 2003]), and the more recently introduced Comprehensive Assessment of Psychopathic Personality – Institutional Rating Scale (CAPP-IRS) (Cooke et al., 2004). For the purpose of the current discussion, the PCL-scales will be from here on referred to as “PCL”, while the CAPP-IRS (Cooke et al., 2004) will be referred to as “CAPP”. This shortening is in the interest of simplicity of exposition, and to increase coherence throughout the discussion.

While we recognize the emergence of new self-report measures of psychopathy which might be useful models for explaining the relationship between psychopathy and risk assessment (e.g. Elemental Psychopathy Assessment; Lynam et al., 2011, and the Triarchic Psychopathy Measure; Patrick, 2010), we will here focus on expert rated measures as these are more commonly utilized in forensic settings (Cooke, 2014; Hare, 2003), and this approach is in line with the call for research by Cooke (2014).

This article is driven by the following questions: a) What is the nature of psychopathy according to the PCL and the CAPP? b) Which measurement model of psychopathy (PCL versus CAPP) has the best utility in predicting and explaining violence? c) What do we know and where do we go from here?

**1. What is the Nature of Psychopathy According to the PCL and the CAPP?**

**1.1 The Psychopathic Personality**

Throughout its emergence as clinical concept, psychopathy has been ever evolving; covering antisocial, abnormal and asocial symptoms (Arrigo & Shipley 2001; Kiehl & Hoffman 2011), and the debate about the true nature of psychopathy, and which behaviors the construct of psychopathy can explain, shows no signs of stopping. Arrigo and Shipley (2001) outlined the historical background of psychopathy, tracing the clinical utilization of the construct back to Phillippe Pinel and his 19th century peers such as Benjamin Rush and J. C. Prichard. These early views of psychopathy, while differing in some aspects (e.g. legal implications), all viewed psychopathy as related to a moral deficiency that was inherent in the person. From the early conceptualizations up to our more recent understanding based on Cleckley (1941), more or less successful attempts at diagnosing the “psychopath” were conducted, and the contested term sociopathy emerged, but this was later dropped from the clinical literature in the 1960s (Arrigo and Shipley, 2001).

Arrigo and Shipley (2001) credits Cleckley (1941) with our most common understanding of the latent construct known as psychopathy, based on his 16 trait clinical profile (e.g. deceitfulness, egocentricity, appearing superficially charming, and a lack of affect). Using the family of measures making up the PCL, the field of psychopathy research thrived, and the PCL remained unchallenged until mid-to-late 2000. With the new CAPP (Cooke et al., 2004) measure developed, Skeem and Cooke’s (2010a; 2010b) criticisms of the psychopathy construct as conceptualized by Hare questioned the utility of PCL measures. The controversy centered on the inclusion of antisocial and criminal behavior as core features of psychopathy, and essentially how to define psychopathy (Blackburn, 1988; Gunn, 2003; Hare & Neumann, 2010; Lykken, 2006; Lynam & Derefinko, 2006 Skeem & Cooke, 2010a; 2010b).

It is beyond the scope of this article to review in detail the conflict that emerged as a result of these papers (Skeem and Cooke, 2010a; 2010b); for that we encourage the reader to consult Poythress and Petrila (2010) and Hart (2010). Nonetheless, the current article contributes to the debate between Skeem and Cooke (2010a; 2010b) and Hare and Neumann (2010) by asking “*what is* psychopathy?” This question is crucial because of the increasing importance of psychopathy in the operation of the criminal justice system. The answer to this question as well as ‘how does psychopathy *explain* violence? are still unclear. As a result, the current power of psychopathy to influence decisions in the judicial system should be questioned. The following sections will address the most central point within this debate, namely whether psychopathy is best understood as a taxon or a dimension.

**1.1.1 Taxometric or dimensional nature.** Historically speaking, the taxometric perspective has been the most popular view of psychopathy (e.g. Hare, 1980, 1993, 1998, 2003; Wright, 2009). Psychopathy as a taxon implies that the construct is a qualitatively distinct, separate category from normal personality functioning (Meehl & Golden, 1982). As highlighted by Harris, Rice, and Quinsey (1994), early work on psychopathy was very much focused on the so called clinically and forensically interesting “psychopath”. Traditionally, this has been the approach taken by common diagnostic manuals for mental disorders such as the Diagnostic and Statistical Manual of Mental Disorders (DSM-5; American Psychiatric Association, 2013). In the DSM-5 section II, all personality disorders (e.g. Antisocial Personality Disorder, Histrionic Personality Disorder, Narcissistic Personality Disorder) are treated as categorical constructs where the diagnosis depends on the fulfillment of a specified number of criteria (e.g. 5 out of 9 for Borderline Personality Disorders) (American Psychiatric Association, 2013). It must however be noted that psychopathy is not a recognised personality disorder in the DSM-5 (American Psychiatric Association, 2013), but several studies have provided empirical evidence for such an underlying taxon of psychopathy (Harris, Rice, & Quinsey, 1994; Vasey, Kotov, Frick, & Loney, 2005). Within this taxometric perspective, the antisocial taxon-based traits are essential to the understanding of the psychopathy construct (Hare & Neumann, 2010; Harris et al., 1994; Wright, 2009).

There are some benefits of a taxometric approach to psychopathy. For example, one might argue that a clear conceptualization of disorder will help to communicate risk (American Psychiatric Association, 2013; Blashfield & Draguns, 1976), understand the etiology and development of disorder (American Psychiatric Association, 2013; Blashfield & Draguns, 1976; Wakefield, 1992), and guide treatment approaches and clinical decisions (American Psychiatric Association, 2013; Blashfield & Draguns, 1976). Finally, a taxometric approach to psychopathy specifically, and personality disorders generally, allows for clearer conceptual boundaries and increased validity of constructs (Livesley & Jackson, 1992).

Despite the empirical support for such taxons, there are problemsassociated with this approach. Categorical perspectives on psychopathology have been criticized for not taking the range of manifestations into consideration, and for making comorbidity difficult to study and treat (DeLisi, 2009; Wright, 2009). Wright (2009) further argued that the counter-evidence of the categorical nature is mounting. Indeed, there is an emerging research base on the dimensionality of psychopathy as part of the normal personality range (Bagby & Widiger 2018; Edens, Marcus, Lilienfeld, & Poythress, 2006; Lynam & Derefinko, 2006; Widiger & Lynam, 1998). This is also the approach taken for personality disorders in DSM-5 Section III, indicating an emerging shift in the understanding of personality disorders (American Psychiatric Association, 2013). There are now a multitude of studies suggesting that the psychopathy construct has a dimensional nature, which implies that psychopathic traits are distributed along a continuum (Edens et al., 2006; Guay, Ruscio, Knight, & Hare, 2007; Marcus, John, & Edens, 2004; Walters et al., 2007a; Walters 2015; Walters, Duncan, & Mitchell-Perez, 2007; Walters, Brinkley, Magaletta, & Diamond, 2008). This has been found for all the traits within the construct, including the antisocial ones (Guay et al., 2007; Marcus, John, & Edens, 2004; Walters et al., 2007a; 2007b). The dimensional view is now much endorsed, and has been recognized by some of the most central researchers in the field, who previously supported a categorical approach (e.g. Hare, 2003; Forth et al., 2003). Dimensionality also allows for psychopathic traits and symptoms to be studied in subclinical populations (Lilienfeld, 1998). The dimensional approach has helped with conducting research on a wide range of topics relevant to the criminal justice system (e.g. interrogative compliance; Larmour, Bergstrøm, Gillen, & Forth).

Taking the view of dimensionality one step further are those who argue that psychopathy is not pathology, but instead constitutes a personality pattern (Bagby & Widiger 2018; Lynam, 2002; Widiger & Lynam, 1998). Widiger and colleagues have been a driving force in placing psychopathic traits within the framework of normal personality. Through a series of studies, they found that psychopathic traits can best be described through the five-factor model of personality (FFM):

Neuroticism, Extraversion, Openness to experience, Agreeableness, and Conscientiousness (Costa & McCrae, 1990; 2017). Through prototypical descriptions, factor analyses, and meta-analytical techniques, the studies of Widiger and colleagues indicate that the extremities of low agreeableness (high interpersonal antagonism) and low conscientiousness (low constraint) are the best explanatory descriptors of the psychopathic personality (Decuyper et al., 2009; O’Boyle et al., 2015; Widiger & Lynam, 1998; Lynam & Derefinko, 2006).

This personality-centered perspective is also supported by research suggesting that personality traits are at the core of the psychopathy construct (Cooke & Michie, 2001; Cooke, Michie, Hart, & Clark, 2005; Skeem & Cooke, 2010a; 2010b). The personality perspective is currently gaining traction within the field of psychopathy measures, as exemplified in the development and validation of the family of self-report measures derived from the Elemental Psychopathy Assessment (EPA, Lynam et al., 2011). The EPA is grounded in the FFM personality perspective, and a total of 18 scales measure the psycophopathic personality. These are all personality oriented, such as “Arrogance”, “Opposition”, “Callousness”, and “Dominance” (Lynam et al., 2011). Because of the popularity of the personality approach, as well as the popularity of the EPA (Lynam et al., 2011; Lynam et al., 2013; Collison, Miller, Gaughan, Widiger, & Lynam, 2016), two shorter versions of the 178 item long original measure have been created (EPA-Short Form; Lynam et al., 2013, and EPA-Super Short Form; Collison, et al., 2016).

While more research is needed from other research groups as well, these studies provide compelling evidence for not only the dimensionality of psychopathic traits, but also for their foundation in the normal personality.

**1.2 Measures of Psychopathic Personality**

As previously introduced, the current review will compare two different groups or families of psychopathy measures referred to as PCL and CAPP. These groups of measurements can be reviewed in the light of the two perspectives discussed above. The PCL-scales can be seen within the more traditional taxometric perspective, while the CAPP measurement should be seen within the more recent dimensional personality perspective.

**1.2.1 The Psychopathy Checklist.** The Hare Psychopathy Checklist-Revised (the PCL-R; Hare, 2003) and its derivatives[[1]](#footnote-1) (e.g. PCL-Screening Version, Hart et al., 1995; PCL–Youth Version, Forth et al., 2003) have widely been considered the “gold standard” of psychopathy assessment (Fulero, 1995; Hare 2016). Table 2 shows the PCL and its derivatives. The PCL inception in the early 1980s (Hare, 1980) was a long time coming as the author Robert Hare had been publishing on psychopathy since 1965 (Hare, 1965a, b, c), and was one of the few researchers interested in this topic at the time (Shipley & Arrigo, 2001). From its inception (Hare, 1980), the PCL has conceptualized psychopathy as a categorical personality disorder (Cooke et al., 2005; Hare, 1993, 2003; Harpur, Hart & Hare, 2002). The original PCL consisted of 22 items (Hare, 1980), which was later reduced to 20 items (Hare, 1991; 2003).

The PCL is an expert-rated tool/scale, where a researcher and/or clinician (with appropriate qualifications and completion of PCL-R workshop) conducts semi-structured interview(-s) and reviews file information (Hare, 2003). According to Hare (2003) the semi-structured interview is recommended, but a file review is necessary. Each item is scored on a 3-point ordinal scale (0, 1, 2), reflecting the degree to which the item applies (Hare, 2003), where a cut off score of 30[[2]](#footnote-2) (out of 40) is used as the criterion for a diagnosis of a “psychopath” (Hare, 1991; 2003). Hare’s PCL conception of psychopathy is built around a medical model characterizing the concept as a diagnosable taxonomic disorder (Walters 2004). That the PCL developed with a cut-off score in order to characterize someone as having psychopathic personality disorder implies a taxonomic view of the disorder. However, with the increasing evidence for the dimensional nature of psychopathic traits, the majority of the PCL manuals do not recommend using a set cut-off point any more (Edens et al. 2006; Forth et al., 2003; Hare, 2003; Walters 2015; Walters, et al. 2007a; 2007b). However, as the legal system is normally interested in a more taxonomic approach (e.g. is the offender a psychopath or not?) in order to make a discrete decision, certain arbitrary cut-off scores are still implemented (DeMatteo et al., 2010). Cut off scores are relevant to the question about the relationship between psychopathy and violence, as they raise a key issue about whether psychopathy scores are linearly or nonlinearly related to behavior.

*Table 1 about here*

The factor structure of the PCL has been the subject of much debate. Historically, the items of the PCL were found to load on to two separate factors, interpersonal/affective (Factor 1), and lifestyle/antisocial (Factor 2) (Hare, 1991). With the 2nd edition of the PCL published in 2003, the factor structure was revised, classifying the psychopathy construct into four facets: interpersonal (facet 1), affective (facet 2), lifestyle (facet 3), and antisocial (facet 4) (Hare, 2003).

There is, however, research contradicting these established factor structures. Cooke and Michie (2001) conducted confirmatory factor analyses on a comprehensive cross-national (North American and Scottish) sample, and found no support for the traditional factor structure. Instead, they proposed a three factor solution, where the antisocial facet was excluded. While this alternative factor structure has caused some controversy (see Hare & Neumann, 2010; Skeem & Cooke, 2010a; 2010b), the 2 factor/4 facet structure is viewed as the most valid construct conceptualization of the PCL in research and applied settings (DeMatteo et al., 2010).

**1.2.2 Comprehensive Assessment of Psychopathic Personality.** Within the CAPP, *personality* is believed to be the focal point of the psychopathy construct (Cooke et al., 2004; Sellbom, Cooke, & Hart, 2015). Therefore, the model adheres to the previously discussed dimensional/personality-centered perspective. While Cooke and Michie’s (2001) alternate three factor structure was derived from the PCL, Cooke and colleagues also developed a brand new model of psychopathy based on personality theory. This model is known as the Comprehensive Assessment of Psychopathic Personality, or CAPP for short (Cooke et al., 2012). The logic behind the development of the CAPP is the idea of further understanding the concept of psychopathy and then developing a measure based on that concept. The PCL has been instrumental in the past decades in developing our understanding of the behavioral and emotional links with psychopathy but, according to Cooke and colleagues (2004; 2012) it does not aid in the understanding of the concept of psychopathy. Consequent, without an understanding and a grounded concept of psychopathy, there is no reference point against which to adequately judge the accuracy of instruments claiming to measure psychopathy (Cooke et al., 2012).

The basis of the CAPP is a dimensional hierarchical model consisting of 6 domains of psychopathic symptomatology (see Table 1). According to Cooke et al. (2012), the 6 domains are as follows: self, emotional, dominance, attachment, behavioral and cognitive. Each domain is measured by a variety of behaviors or indicators (4-7 for each domain) such as sense of entitlement, self-centered (self domain), lacks emotional depth, and lacks remorse (emotional domain). Each domain and maladjustment severity is rated on a 7-point ordinal scale from 0 (not present) to 6 (very severe) (Cooke et al., 2012). No cut-off scores are provided in the CAPP manual, as psychopathic traits are viewed as falling on a continuum of severity (Cooke et al., 2012).

**1.2.3 Validity and reliability of the PCL and the CAPP.** Because of the longevity of the PCL and the recency of the CAPP, there are different numbers of validity and reliability studies in the two traditions.

***1.2.3.1 PCL: established as valid and reliable***. The PCL was originally developed and validated on a sample of North American offenders (alpha reliability = .88, convergent validity=.83) (Hare, 1980), and has since then been found to have good validity and reliability in offender samples (Forth, Brown, Hart, & Hare, 1996; Hare, Harpur, Hakstian, Forth, Hart, & Newman, 1990; Jeandarme et al., 2017; Kosson, Smith, & Newman, 1990; Neumann, Hare, & Pardini, 2015; Poythress et al., 2010), psychiatric samples (Hare et al., 1990; Grann, Langstrom, Tengstrom, & Stalenheim, 1998; Jeandarme et al., 2017; Neumann, Hare, & Pardini, 2015; Walters, 2003**;** Skeem & Mulvey, 2001) and community samples (Kosson, Cyterski, Steuerwald, Neumann, & Walker-Matthews, 2002; Malterer, Lilienfeld, Neumann, & Newman, 2010). In addition, PCL results have been found to be cross-culturally robust (Hare et al., 2000; Neumann, Hare, & Pardini, 2015)[[3]](#footnote-3).

***1.2.3.2 Emerging validation of the CAPP****.* There have only been a handful of validation studies of the CAPP (see Table 3). The majority of these have assessed the prototypical validity of the measure, which has been considered to be the initial step in the validation of a concept. This evaluation assesses the most fundamental features of a concept through a more bottom-up approach, expressed through evaluations by experts and lay-people of the features that are most strongly related to the concept of psychopathy (Livesley, Reiffer, Sheldon, & West, 1987). As more individuals evaluate the concept, tthe emerging factors become more apparent. Five studies conducted prototypical analysis: two international samples (English speaking mental health professionals) (Kreis & Cooke, 2011; Kreis, Cooke, Michie, Hoff, & Logan, 2012), one Swedish sample (English speaking mental health professionals; Sörman et al., 2014), one Spanish sample (Spanish speaking mental health professionals, health professionals, and lay people; Florez et al., 2015), and one Norwegian sample (mental health professionals and lay people) (Hoff, Rypdal, Mykletun, & Cooke, 2012). These studies found that both the symptoms (33) and the overarching domains (six) were overall considered to be moderately to highly prototypical of the psychopathic personality (e.g. Hoff et al., 2012).

*Table 2 about here*

While of somewhat questionable methodological quality, as it was only based on two cases, Dawson, McCuish, Hart, and Corrado (2012) compared the utility of a PCL scale (PCL:YV) and the CAPP in adolescence. The convergent validity between the measures was unfortunately mainly of a descriptive nature and no correlations were calculated. However, the descriptive material does indicate that the cases were assessed similarly by both measures.

Although, in the future, more studies testing the validity and reliability of the CAPP will start to emerge, currently the CAPP is showing acceptable prototypical validity (Florez et al., 2015; Hoff et al., 2012; Kreis & Cooke, 2011; Kreis et al., 2012; Sörman et al., 2014) criterion validity (McCormick 2015; Nikolova, 2009), and construct validity (Dawson et al. 2012; McCormick, 2015; Pedersen, Kunz, Rasmussen, & Elsass. 2010; Sandvik et al. 2012; Sellbom, Cooke, & Hart, 2015;).

From a sound methodological standpoint, the study by Pedersen et al. (2010) is the most adequate. These authors investigated the interrater reliability, internal consistency, and convergent and predictive validity of the CAPP and the PCL in a Danish forensic psychiatric sample (N=96). Predictive validity will be discussed in section 2.1. For the purpose of the current section, the findings relating to reliability and convergent validity will be discussed. The CAPP inter-rater reliability was found to be in the range of .51 to .79, depending on the domain. The internal consistency for the CAPP showed a Coefficient alpha of .96, and the convergent validity between the PCL and CAPP was very high at r=.90 (for total scores).

More recently, Sellbom et al. (2015) examined the construct validity of the CAPP using an international community sample. The internal structure of the self-rating CAPP indicated a general psychopathy factor and three residual factors (Boldness/emotional, emotional detachment, disinhibition).

**2. Which Measurement Model of Psychopathy has the Best Utility in Predicting and Explaining Violence?**

**2.1 Theoretical Foundations**

McCuish et al. (2015) called for a better theoretical foundation for the relationship between psychopathy and violent behavior. Fox, Jennings, & Farrington (2015) integrated psychopathy into 10 major Developmental and Life-Course Criminological Theories and, while it is beyond the scope of the current article to review all of these, an example might help to illustrate this integration. Fox et al. (2015) suggested that psychopathy can increase both long-term and short-term Antisocial Potential, one of the central constructs in the Integrated Cognitive Antisocial Theory (ICAP; Farrington, 2005). Within this framework, somebody high on psychopathic traits, and thus high on AP, would show a propensity to act violently in situations (Fox et al., 2015). The ICAP theory could also be useful because this theory includes many of the explanatory factors that are also present in violence (see Farrington, 2005 and Anderson & Huesmann, 2003).

*2.1.1 Empathy as integral to future theory.* Considering further the relationship between psychopathic traits and violent behavior, it has been suggested that it is not the psychopathy construct as a whole that predicts violence, but instead elements of the construct (Coid et al., 2011). Historically, currently, and independently of the conceptualization of psychopathy, *empathy*, or *the lack thereof*, has been one of the defining features of psychopathy[[4]](#footnote-4) (Cleckley, 1941; Cooke et al., 2004; Hare, 2003; McCord & McCord, 1964; Soderstrom, 2003). While the PCL-scales have conceptualized empathy dichotomously (people either have empathy or lack empathy; Hare, 2003), the CAPP views empathy as a continuum based on the severity of the empathy deficiency (Cooke et al., 2004).

Empathy deficits are common in serious offenders[[5]](#footnote-5), and current research indicates that psychopaths do not understand or react to the feelings and experiences of others in a socially normative way (Blair, 2003; Blair, Jones, Clark, & Smith, 1997; Deeley et al., 2006; Hastings, Tangney, & Stuewig, 2008; Kosson, Suchy, Mayer, & Libby, 2002; Stevens, Charman, & Blair, 2001; Williamson, Harpur, & Hare, 1991). Interestingly, a recent study suggests that psychopaths are able to control their level of affective empathy (Meffert, Gazzola, den Boer, Bartels, & Keysers, 2013). Psychopaths’ initial reactions to affective images (a video of hand movements) were in accordance with the previous literature suggesting an empathy deficit (based on brain activity). However, when the psychopaths were explicitly told to “feel” with the imagery presented, their brain activity indicated an affective reaction. The change in the level of affective empathy was significant, but it still did not reach the reaction level of their non-psychopathic counterparts. This line of research is quite novel, and the study suffers from a number of limitations (e.g. a limited sample size), but it does provide further support for an affective empathy dysfunction in people with a psychopathic personality.

 Based on these dysfunctions and abnormalities in empathy processing, it is believed that psychopaths will be more likely to engage in severe antisocial acts, such as violence (Blair, 1995; Jolliffe & Farrington, 2006). The strong inverse relationship between empathy and violence has been found in a wide range of contexts and samples (Jolliffe and Farrington, 2004), such as in children (Kaukiainen, Björkqvist, Österman, & Lagerspetz, 1996; Kaukiainen, Björkqvist, Lagerspetz, & Ahlbom, 1999), adolescents (Jolliffe & Farrington, 2006), offenders (Jolliffe & Farrington, 2004), and non-English samples (Gini, Albiero, Benelli, & Altoe, 2007), showing that there is a vast amount of theoretical and empirical evidence supporting both the lack of empathy in people with psychopathic traits, and the relationship between low empathy and violence.

**2.2 The Predictive Validity of Psychopathic Traits**

Following on from the theoretical perspectives, a review of the predictive validity of psychopathic traits is imperative for the current discussion. If psychopathic traits are not predictive of violent behavior, this would question the rationale for using the construct of psychopathy in risk assessment. Because of the vast number of single studies (more than 90 in number; see Leistico et al., 2008 for a review) that have been conducted on the predictive validity of psychopathy for violence, it is most useful to review the most central meta-analyses (see Table 3). The use of systematic reviews and meta-analytic approaches have clear benefits over single studies, as they summarize all studies within the field, and also assess how consistent the findings are (Gendreau, Goggins, & Smith, 2002; Jolliffe & Farrington, 2004).

 Salekin et al. (1996) included a total of 18 studies in their meta-analysis of the relationship between psychopathy and future antisocial behavior and violence. Thirteen of these studies allowed the calculation of a summary effect size for the predictive power of psychopathy on violent recidivism, and Cohen’s d was found to be .79. Ten studies used general recidivism as an outcome, and the predictive power of psychopathy was *d*=.55. The meta-analyses indicate that psychopathy is a stronger predictor of violence than of general recidivism. Walters’ (2003) meta-analysis included a total of 42 studies, and both institutional adjustment and recidivism (non-violent and violent) were used as outcomes. For violent infractions in the institution, the weighted r was .12 (p<.05) for Factor 1, and .22 (p<.05) for Factor 2 (based on a total of 14 effect sizes). For violent recidivism after release, the weighted r was .18 (p<.001) for Factor 1, and r=.26 (p<.001) for Factor 2 (based on a total of 27 effect sizes).

 In the most comprehensive meta-analysis to date, Leistico et al. (2008) included a total of 95 studies. The total N included in the meta-analysis was 15 826 participants. The meta-analysis assessed the predictive accuracy of both PCL total, Factor 1, and Factor 2 scores for violent offenses. The mean weighted d for PCL total scores .47 (number of studies=36-38), while factor 1’s effect size was .40 (n=6 437). Finally, Factor 2 was found to have the strongest predictive validity for violent offenses with a Cohen’s d of .57 (n=6 387).

 The relationship between psychopathy and violence has also been investigated by meta- analyses on adolescent samples. Edens et al. (2007) found that the effect of total psychopathy on violent recidivism was a weighted r=.25 (p<.001; number of studies=10). The results at a factor level were as follows: Factor 1’s effect size was r=.19 (p<001), and Factor 2’s mean weighted effect size was r=.26 (p<.001). Similarly, Edens et al. (2007) investigated the predictive validity of adolescent psychopathy for violence and aggression. For total psychopathy, the mean weighted effect size was r=.25 (p<.001) for aggression, and r=.28 (p<.001) for physical violence.

 Blais et al. (2014) conducted the only meta-analysis to date where they separated the violence outcome into reactive and instrumental violence. The authors included a total of 53 studies (N=8 753). Total psychopathy was equally related to reactive and instrumental violence, but it seems that the personality oriented factor (and facets) was more strongly related to instrumental violence, while the behavioral factor (and facets) was more strongly related to reactive violence (see Table 3).

 Table 3 provides an overview of the meta-analyses in question in accordance with Leisitco et al. (2008). For overview purposes, the reported r’s were transformed into Cohen’s d’s as was also done by Leistico et al. (2008, p. 30) (d is approximately 2*r*). In sum, these comprehensive meta-analyses indicate that the predictive efficiency of psychopathy (both for adult and adolescence) on violence ranges between moderate and large.

*Table 3 about here*

**2.2.1 Comparison of the PCL-scales with other violence risk assessment tools.** Gendreau et al. (2002) conducted a meta-analysis comparing the predictive utility of the PCL-R and the LSI-R for general and violent recidivism. A total of 57 studies (all prospective) were included in the analysis, and calculated effect sizes indicated that the LSI-R was superior to the PCL-R in predicting general recidivism. While the difference in predictive utility between the measures was smaller for violent recidivism, the LSI-R was also found to be better at predicting future violence. One of the largest and most comprehensive meta-analyses to date was conducted by Campbell, French, and Gendreau (2009), in which a total of 88 studies from a 26-year time period (1980-2006) were included. This meta-analysis compared five different scales, the HCR-20, LSI/LSI-R, PCL-scales (PCL, PCL-R, PCL-SV), SIR-scale, and the VRAG, and compared these on both institutional violence and violent recidivism. The really interesting part of their results was that all of the instruments performed comparably well for predicting violent recidivism. These results question the assumed advantage of the PCL-scales in violence risk assessment.

Yang, Wong, and Coid (2010) similarly compared a large number of risk assessment tools in their meta-analysis of 28 studies over a ten-year period (1998-2008). Nine instruments were included (HCR-20, PCL-scales [PCL-R, PCL:SV], OGRS, VRAG, LSI-R, Static-99, SVR-20, and RM2000V); for an overview of the instruments, see Yang et al., (2010). Interestingly, the authors found that there were no significant differences in their ability to predict future violence. This means that the PCL-scales are as accurate as other commonly used measures of risk assessment, but the HCR-20 was found to predict violence somewhat better than the PCL-scales. Interestingly, PCL Factor 1 was the weakest predictor amongst all the different measures and their subscales. The authors voice their concerns about the use of these measures as the calculated effect sizes were in the moderate range (the authors relied on Cohen’s 1988 guidelines where an effect size of *d* of .5 is considered a medium effect). Cohen’s 1988 guidelines have however been criticized in recent years (e.g. Gignac & Szodorai, 2016; Hill, Bloom, Black, & Lipsey, 2008; Lovakov & Agadullina, in press). It has been argued that effect sizes must be understood and interpreted in relation to the problem and issue at hand (Hill et al., 2008). In the current context, one can argue that *d*=.2 is quite a large. For example, Farrington and Koegl (2015) found that this size of effect corresponds to an 18% reduction in offending.

Farrington, Jolliffe, and Johnstone (2008) conducted a comprehensive systematic review and meta-analysis of static and dynamic violence risk assessment instruments. The meta-analysis included the VRAG, the PCL-R/PCL:SV, HCR-20, LSI-R/LSI-SV, OGRS (Offender Group Reconviction Scale), GSIR (General Statistical Information on Reconvictions), RM2000V, and SAQ. The OaSys SV and VRS were included in Farrington et al.’s (2008) review, but was not included in comparisons because of the few studies available on these instruments. Of the remaining instruments, the GSIR predicted violence the best. When comparing the GSIR with the PCL-R however, the GSIR did not have significantly better predictive ability.

As these meta-analyses indicate, the empirical evidence on the utility of the PCL-scales compared to other commonly used measures is somewhat mixed. However, this does not necessarily mean that the *psychopathy* construct is interchangeable with other measures, as there is more than one family of tests of psychopathy.

**2.2.2 Empirical Comparison.** To date, there is only *one* published study that has empirically compared the predictability of the PCL with the CAPP. This severely limits conclusions about comparisons about the PCL and the CAPP and their effectiveness in risk assessment. Pedersen et al. (2010) compared the predictive power (after an average of 5.7 years) of the PCL and CAPP in violence risk assessment amongst 96 discharged forensic psychiatry. The psychopathy scores as measured by the PCL:SV were similar to that of other male forensic samples (Walters et al., 2007) with a *Mean* of 14.19 (*SD*=5.12) (CAPP average score was 78.72, *SD*=31.30) (Pedersen et al., 2010).

As expected, and in accordance with previous literature in the area, the PCL:SV was found to be a significant (p<.01) predictor of violent crime with an AUC[[6]](#footnote-6)=.73 (a moderate to large effect size). Both PCL factors were significant as well, and Factor 2 (AUC of .72, p<.001) was more strongly related to violence than was Factor 1 (AUC = .71, p<.01). Similarly significant effect sizes were found for the total CAPP (AUC = .70, p<.01). The behavioral domain had the largest effect size (AUC = .73, p<.001), closely followed by the attachment domain (AUC = .68, p<.01), the dominance domain (AUC = .68, p<.01) and the emotionality domain (AUC = .67, p<.01). Neither the cognitive domain nor the self domain were significant predictors of violent recidivism.

These results are quite interesting since the cognitive domain consists of symptoms such as “intolerant” and “inflexible” and the self domain consists of symptoms such as “self-entitlement” and “sense of invulnerability” (Kreis et al., 2012), which theoretically speaking, should increase the risk for violence (e.g. through increased AP using Farrington’s [2005] theory). And again, the results show that behavior (e.g. “restless” and “aggressive”; Kreis et al., 2012) emerges as the strongest cluster of predictive traits (Pedersen et al., 2010). Pedersen et al. (2010) finally concluded that there is not a significant difference in predictive validity and utility between the well-established PCL and the more recent CAPP. While Pedersen et al. (2010) did not find that the CAPP performed notably better in predicting violent recidivism than the PCL, the study had a relatively small sample and it is questionable if a Danish sample (although, many had other backgrounds than Danish) can be generalized to other contexts (Pedersen et al., 2010). The sample was also unique as it consisted of some mentally disordered offenders diverted to treatment (Pedersen et al., 2010).

Another methodological concern that should be addressed is that of the issue of follow-up periods. The study by Pedersen et al. (2010) used a fairly short follow up period of an average of less than 10 years. As highlighted by Farrington (1992), follow-up periods for recidivism should be the entire lifespan. One might speculate that those who are high on behavioral traits are impulsive and more likely to recidivate faster, while those who ave a more callous nature will take longer. The potential issue of false desistance (Carlsson & Sarnecki, 2015) might influence prediction.

**2.2.3 Types of violence.** An issue that has yet to be addressed is the type of violence that psychopaths typically commit. This concerns the nature of the established predictive relationship of psychopathic traits for violence. General violence has often been theorized to be a result of anger and frustration (Haugan & Jarwson, 2005; Walker & Bright, 2009), and many violent offenses take place during situations that can be viewed as highly emotional, like during arguments with peers or friends. A violent punch might be more a result of frustration and sadness than a true and real wish to hurt the other party (Berkowitz, 1978). Psychopathic individuals, who do not respond to emotional stimuli in the same manner as non-psychopaths (Benning, Patrick, & Iacono, 2005; Birbaumer et al., 2005; Hare, 1965a; 1965b, 1966), it is likely that the type of violence will differentiate them (Woodworth and Porter, 2002). This is supported by the empirical research. Psychopaths appear to be more likely to be seriously violent as a result of an instrumental, or proactive, intent compared to non-psychopaths (Blais et al., 2014; Woodworth & Porter, 2002).

**2.3 Changes in Psychopathy versus Changes in Violence Risk**

Central to the distinction between prediction and management is the differentiation between static and dynamic risk factors. The former are historical and unchangeable, while the latter can be changed and managed (Bonta & Andrews, 2017). With the introduction of actuarial risk assessment tools[[7]](#footnote-7), statistical techniques were used to identify the strongest *static* predictors of violent recidivism (Bonta & Andrews, 2006). Examples of risk factors included in the most commonly used actuarial violent risk assessment tool, the VRAG, are a history of violence, poor school adjustment, prior violations of conditions, and *psychopathy* (as measured by the PCL-R) (Quinsey et al., 2006). In the most updated version of this instrument, the VRAG-R, Facet 4 (antisocial) is the only aspect of psychopathy taken into consideration (Harris et al., 2015). Total psychopathy scores and Facet 4 scores were both found to be the strongest predictors of violent recidivism (Harris, Rice, & Quinsey, 1993; Harris et al., 2015).

With the introduction of 3rd generation risk assessment tools (i.e. using Structured Professional Judgement, or SPJ), most notably the HCR-20 and HCR-20v3(Webster et al., 1997; Douglas et al., 2013) dynamic risk factors were included in the assessments (Bonta & Andrews, 2017; Murray et al., 2009; Webster et al., 1997). Ideally, changes in the outcome would follow changes in the predictive factors (Murray et al., 2009). The SPJ approach has received much support from forensic and correctional psychologists because of the prospect of risk management (Bonta & Andrews, 2017). The benefits of the inclusion of dynamic risk management factors is apparent in comparisons between the PCL-scales and 3rd generation risk assessment scales. For example, Douglas et al. (1999) found that, while the score on the PCL was an important predictor of violent recidivism, the HCR-20 accounted for more of the total variance above and beyond the PCL. In addition, the HCR-20 showed more consistent results across individuals, and dynamic factors such as “stress” and “lack of personal support” (the “risk management” subscale of the HCR-20) were actually better predictors of violence than the PCL. Similarly, Campbell et al. (2009) found in their meta-analytical comparison of second generation (mainly static risk factors) and third generation (including dynamic risk factors) violence risk assessment instruments, that the latter were stronger predictors of violence recidivism.

**2.4 Static and Dynamic Predictors in Psychopathy Measures**

The psychopathic personality has long been considered a stable and static construct across the lifespan (Andershed, 2010; Hare, 1993; 2003). The notion of stability is also ingrained in the way that the PCL-scales are constructed. The PCL-scales mainly include static, historical factors that cannot be changed or altered (Hare, 2003). Therefore, the assessed risk is likely to be static. Several authors and researchers have however emphasized the importance of detecting changes in risk. The concern is that the result of a one-time static assessment will have deterministic connotations (Cauffman et al., 2016; Dvoskin & Heilbrun, 2001; Douglas & Kropp, 2002). Douglas and Skeem (2005) argue that the ability of a risk assessment tool to detect changes should be one of the main goals for the development of new measures, as they will not only inform about risk, but also about *when* and *how* to reduce it.

Risk for violence is dynamic, *not* static (Douglas & Skeem, 2005; Harris, Rice, & Quinsey, 1998; Webster et al., 1997), and this is demonstrated in research on dynamic risk factors in risk assessment. Howard and Dixon (2013) demonstrated that the risk level as measured by dynamic factors did significantly change during a 48 month multi-wave study of offenders. More importantly, all offenders did indeed decrease in risk, illustrating the problems with using only static risk assessment. Recidivists were however less likely to change on dynamic risk factors over time, compared to non-recidivists. Not only does the risk for violence change, but psychopathic traits themselves are amenable to change over time (for an overview see Andershed, 2010).

 Due to the CAPP’s more dynamic and dimensional nature, Cooke et al. (2004; 2012) have argued that this measure will be better in detecting changes and variability compared to the more categorical measures of psychopathy (e.g. the PCL). The CAPP-IRS manual also outlines the possibility of both shorter and longer assessment intervals (Cooke et al., 2004). With the acknowledgement that psychopathic traits might vary across time, the CAPP reduces the likelihood of determinism within both psychopathy and violence risk assessment. Therefore, the CAPP is likely to be valuable in risk *management* as well as prediction (Cooke et al., 2004; 2012).

 It has however been questioned whether dynamic measures are actually able to detect change over time (Viljoen, Shaffer, Gray, & Douglas, 2017). Viljoen et al. (2017) compared the SAVRY, YLS/CMI, and the PCL:YV in their ability to detect change in risk over time. Both the SAVRY and the YLS/CMI are risk instruments that includes both dynamic and static risk factors, while the PCL:YV is considered a static instrument (Viljoen et al., 2017). Interestingly, Viljoen et al. (2017) found that the dynamic measures did not perform much better than the static PCL:YV in detecting change over time. As a result, it was recommended that the dynamic measures should be further developed in order to be truly dynamic over time (Viljoen et al., 2017). These findings highlight the need for continuous research on measures that claim to be sensitive to changes in risk and to perform better because of their dynamic nature (Viljoen et al., 2017).

 It should also be recognized that not all dynamic risk factors are the same. Dynamic risk factors can be further divided into stable and acute risk factors (Hanson & Harris, 2000). Stable dynamic risk factors are factors that are changeable, but are unlikely to change rapidly or without intervention. Acute dynamic risk factors on the other hand, are, as the name implies, more likely to change acutely and rapidly (Hanson & Harris, 2000). It must be acknowledged that, if a measure of psychopathy is to be useful in a risk assessment setting, it should not be too changeable, as it would be questionable ethically given it being such a stigmatising disorder (Seagrave & Grisso, 2002).

**2.4.1 The Issue of Tautology.** A limiting factor of the PCL’s usefulness in explaining violent behavior is its emphasis on measuring previous antisocial behavior. Past antisocial behavior is highly predictive of future violent and criminal behavior (Loeber, Wei, Stouthamer-Loeber, Huizainga, & Thornberry, 1999). Therefore, there is the risk of stating that the reason why psychopathy predicts violence is because it is measuring past antisocial behavior and not because it measures a personality construct per se (Cooke, 2014; Cooke & Logan, 2015). This may overemphasize the link between psychopathy and violence. There is some empirical support for this notion, based on Coid et al.’s (2011) results, where none of the interpersonal and/or affective items were predictive of violent reconvictions. This is further supported by research suggesting that it is the behavioral factor (Factor 2/[facet 3/facet 4]) that is most closely linked to violent recidivism (Leistico et al., 2008; Walters, 2003; Walsh & Kosson, 2008). These results are not surprising when taking into account that the PCL-scales were developed on, and meant to be used with, correctional populations (Hare, 1980; Hare, 1991; Hare, 2003).

Hare and Neumann (2010) have emphasized the importance of antisocial behavior as part of the psychopathy construct, and urge the differentiation between *criminal* and *antisocial* traits. The authors claim that it is antisociality that is being measured by the PCL, not criminality. However, many PCL items are either directly or indirectly measuring criminal behavior, making it difficult to obtain a high score on the PCL without having previously engaged in this type of behavior (Skeem & Cooke 2010a; 2010b). For example, item 16 (“failure to accept responsibility for one’s own actions”) can reflect an inability to take responsibility for criminal actions, item 9 (“parasitic lifestyle”) can include benefitting from the profits of crime (e.g. pimping), and item 3 (“need for stimulation/proneness to boredom”) can relate to criminal activities such as drug taking (Hare, 2003). These more indirectly criminal items are in addition to the overtly criminal items such as “juvenile delinquency”, “revocation of conditional release”, and “criminal versatility”. The main questions that arises as a result is: Is psychopathy explanatory or is it just measuring the same underlying construct as violence? To be explanatory, the PCL should be measuring a different underlying construct from antisocial behavior (e.g., a personality construct). Otherwise, there is the danger that the PCL predicts antisocial behavior mainly because past antisocial behavior predicts future antisocial behavior.

A more personality-based approach was adopted by Cooke et al. (2004; 2012) in the CAPP. The CAPP’s approach to psychopathy is less tautologically flawed because of its exclusion of severe antisocial and criminal behavior from the domains and symptoms. The more personality centered-approach of the CAPP is supported by research suggesting that *personality* traits, and more specifically *deficient affective experience*, are the most central to the psychopathy construct (Cooke & Michie, 2001; Cooke, Michie, Hart & Clark, 2005), thus measuring a potential different underlying construct to that of criminal behavior.

This does not, however, negate the role of psychopathic traits and psychopathy within violence risk assessment. In an attempt to avoid tautological issues altogether, Tengstrom et al. (2004) removed the items of the PCL-R (Hare, 2003) that are directly measuring criminal behavior (i.e. items 18 and 20) in their study of the relationship between psychopathy and criminal offending. Their findings indicated that the association between psychopathy and violent offending was strong, positive, and significant. We conclude that psychopathy is a useful predictor of violent behavior, but that the focus should be on psychopathic *personality* as in the CAPP.

**3. What do we Know and Where do we go from Here?**

The only study of the predictive efficiency of the CAPP (Pedersen et al., 2010) suggests that it is comparable to that of the PCL. However, the CAPP is beneficial in being dynamic rather than static and in measuring psychopathic personality rather than past behavior. The predictive relationship between the psychopathic personality and violence is well-established (Edens & Campbell, 2007; Edens et al, 2007; Leistico et al, 2008; Salekin et al., 1996; Walters, 2003). However, prediction does not imply causality, and the nature of this relationship is not clear, which questions the utility of including psychopathy within violence risk assessment (Cooke,2014; McCuish et al., 2015). While Hare (1998) strongly supports the use of the PCL as a risk assessment tool, the present review questions the utility of the PCL, based on comparisons with other risk assessment tools, the static nature of the PCL-R measurements, and potential issues of tautology. As the review of some of the most central meta-analyses in section 2.3 shows, the PCL is not superior in predictive power to other violence risk assessment measures, questioning Hare’s (1998) arguments. Furthermore, the risk of tautology in the PCL makes it difficult to draw clear conclusions about the explanatory utility of psychopathy (Walters, 2004).

The PCL has greatly contributed to the understanding of psychopathy, and has arguably been highly influential in the development of the psychopathy research field the past 30 years. New theoretical insights and novel empirical findings point to a new direction in the field. Perhaps some of the most important findings are the recognition of psychopathy as a dimensional construct that actually *does* change over time. The CAPP is arguably more concordant with the new literature, and its inclusion of dynamic factors will reduce the risk of deterministic conclusions. What we do know as of now is that not only do psychopathic traits change over time, but so also does the risk of violence. Neither psychopathic traits nor the risk of violence are static, and a psychopathy measure used in risk assessment must be able to reflect dynamic changes. The almost complete lack of studies of direct comparisons between the PCL and CAPP (the only exception being Pedersen et al. [2010]) illustrates the great need for more research on this topic. The comprehensive nature of the CAPP instrument makes assessment and subsequent research time consuming and potentially difficult. To spur research, it would be beneficial to develop a screening version of the CAPP for easier and more efficient use, especially in community samples. The CAPP is currently under development and will in time consist of a *family* of tests to be used within different contexts (Cooke et al., 2004; 2012). Using CAPP instruments that are specific to contexts such as the community, it will be possible to investigate possible moderators and mediators of the relationship between psychopathy and violence.

Based on the strong and significant *predictive* relationship of psychopathic traits for violent behavior, we support the use of psychopathy within risk assessment. However, we leave here with three questions: what do we want psychopathy in risk assessment to do? Simply predict? Or also help to *manage* and *explain* violence?

**3.1 Future Research**

To fully understand and explain the utility of psychopathy within risk assessment, it is necessary to delve further into the relationship between psychopathic traits and violent behavior. It is strongly recommended to conduct longitudinal studies on the relationship between the two constructs. Longitudinal studies will not only increase the statistical power of the analyses, but will also make it possible to investigate within-individual changes in psychopathic traits and how they affect within-individual changes in violence risk. In addition, they would make it possible to assess potential moderator and mediator effects that influence the risk of violent behavior and recidivism.

Alone, psychopathy is not sufficient to fully explain violent behavior. It is important that the definition and measurement of psychopathy moves away from tautological issues by emphasising a personality-based approach as in the CAPP. In other words, it is important to understand how the cognitive and affective aspects of psychopathy (e.g. low empathy) influence an individual’s behavior rather than to focus on how previous behavior predicts future behavior. Furthermore, using a dimensional personality perspective might help to understand which aspects of psychopathy are relevant to violent behavior and which aspects are not, and how the psychopathic personality interacts with the environment to produce violent behavior.

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Table 1.

*Overview of the PCL (and its derivativees) and the CAPP.*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Instrument | Developers | Items | Scoring | Dynamic/Static | Dimensional | InterviewRequired |
| PCL-R | Hare (2003) | 20 | 3-point scale | Static | Yes/No | No |
| PCL:SV | Hare | 12 | 3-point scale | Static | Yes/No | No |
| PCL:YV | Forth et al. (2003) | 20 | 3-point scale | Static | Yes/No |  |
| APSD | Frick & Hare (2001) | 20 | 3-point scale | Static | Yes/No | Filled out by teachers/parents/self-report |
| SRP-III | Paulhus, Hemphill, & Hare (2012) | 60 | 5-point scale | Static | Yes | Self-report |
| SRP-SF | Hare & Neumann (in press) | 29 | 5-point scale | Static | Yes | Self-report |
| CAPP | Cooke et al. (2004) | 6 domains33 symptoms | 7-point scale | Static and dynamic | Yes | No |

Table 2.

*Overview of the reliability and the validity of CAPP*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Author | Scale | Sample | Types of analyses | Estimates |
| Kreis & Cooke (2011) | CAPP | International mental health professionals (N=132) | Content validity | Moderate to highly prototypical assessments |
| Kreis et al. (2012) | CAPP | International mental health professionals (N=132) | Content validity | Moderate to highly prototypical assessments |
| Hoff et al. (2012) | CAPP | (1) Norwegian forensic mental health professionals (n=211)(2) Correction professionals (n=32)(3) community sample (n=553) | Content validity | Highly prototypical assessments [all samples] |
| Dawson et al. (2012) |  | Adolescents (N=2) | Construct validity | Highly similar descriptive convergent validity assessments |
| Pedersen et al. (2010) | CAPP  | Danish Psychiatric Patients (N=96) | Internal consistency (alpha)Interrater reliabilityConstruct validity | .96.51-.79Convergent validity .90 |
| Sellbom et al. (2015) | CAPP Self-Rating | Community sample (N=719) | Internal consistency (alpha)Construct validity | .96Internal structure [global psychopathy & residual boldness/emotional stability, emotional detachment, & disinhibition]Substantial convergent validity [prototypicality ratings from Kreis et al. (2012)] |
| Florez et al. (2015) | CAPP Spanish version | (1) Spanish mental health experts (n=187)(2) Spanish health professionals (Nurses, GPs) (n=143)(3) Spanish community sample (n=282) | Content validity | Moderate to high prototypical assessment [all samples] |
| McCormick (2007) | CAPP | Undergraduate & Graduate (n=6) | Internal consistency (alpha)Interrater reliability | .87.91 |
| Nikolova (2009) | CAPP-IRS | (1) Correction staff (n=37)(2) Inmates (n=101) | Internal consistency (alpha)Interrater reliabilityCriterion validityConstruct validity | .93-.77.49-.64Acceptable concurrent validity [PPI-R & PAI\_antisocial]Acceptable convergent validity [FFM & nomological network] |
| Sandvik et al. (2012) | CAPP-IRS | Norwegian inmates (N=80) | Internal consistency (alpha)Construct validity | .81Convergent validity .83 [PCL-R] .30 [SRP-III] |
| Sörman et al. (2014) | CAPP | Swedish forensic mental health professionals (N=90) | Content validity | Moderate prototypical assessment |
| McCormick (2015) | CAPP-IRS | Youth offenders (n=186) | Internal consistency (alpha)Construct validityCriteria validity | .89High convergent validity [PCL-YV]Limited support for concurrent & divergent validity [PCL-YV] |
| Gatner, Douglas, & Hart (2017) | CAPP | Undergraduate students (n=439) | Content validityConvergent validity | Moderate to high convergent validity. |
| Robinson (2017) | CAPP | Laypeople from the U.S. and Spain | Cross cultural content validity | Moderate prototypical assessment |

Table 3.

*Effect sizes for psychopathy versus violent offenses and infractions.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Meta-analysis | Number of studies | Prospective(yes/no) | Summary effect sizes | Calculated Cohen’s *d* |
| Salekin et al. (1996) | 13 | Not known | d=.79 (Total) | d=.79 |
| Walters (2003) | 14-27 | Yes | r=.12 (Factor 1) r=.26 (Factor 2 | d=.24d=.54 |
| Leistico et al. (2008) | 38-68 | Yes | d=.47 (Total)d=.40 (Factor 1)d=.57 (Factor 2) | d=.47d=.40d=.57 |
| Edens et al. (2007) | 12-14 | Yes | r=.25 (Total)r=.19 (Factor 1)r=.26 (Factor 2) | d=.52d=.39d=.54 |
| Edens and Campbell (2007) | 10 | Yes | r=.28 (Total) | d=.58 |
| Blais et al. (2014) [outcome: reactive violence] | 53 | Not known | r=.33 (Total)r=.30 (Factor 1)r=.38 (Factor 2)r=.36 (Facet 1)r=.30 (Facet 2)r=.44 (Facet 3)r=.31 (Facet 4) | d=.70d=.63d=.82d=.77d=.63d=.98d=.65 |
| Blais et al. (2014) [outcome: instrumental violence] | 53 | Not known | r=.33 (Total)r=.30 (Factor 1)r=.29 (Factor 2)r=.42 (Facet 1)r=.35 (Facet 2)r=.38 (Facet 3)r=.29 (Facet 4) | d=.70d=.63d=.60d=.93d=.74d=.82d=.61 |

*Note: Since Blais et al. (2014) investigated two different violent outcomes, the findings are presented separately.*

1. As stated in the introduction, the PCL-R and its derivatives will be referred to as PCL for simplicity. [↑](#footnote-ref-1)
2. In Europe, it is common to use a cut-off score of 25-26 (Hare, Clark, Grann, & Thornton, 2000). [↑](#footnote-ref-2)
3. Due to the vast number of studies on the reliability and validity of the PCL we recommend consulting the PCL-R manual (Hare, 2003) for a more comprehensive overview. [↑](#footnote-ref-3)
4. The central role of empathy has also recently been recognized in the DSM-5’s new criteria (section III) for Antisocial Personality Disorder (American Psychiatric Association, 2013). [↑](#footnote-ref-4)
5. E.g. In a meta-analysis, cognitive empathy and affective empathy were both related to offending. However, cognitive empathy was more strongly related to violent offending (Jolliffe & Farrington, 2004). [↑](#footnote-ref-5)
6. The AUC is the most widely accepted measure of predictive efficiency. However, it has some disadvantages. For example, it gives equal weight to all possible outcomes (true positives, false positives, true negatives, false negatives). Also, predictive efficiency is not the only criterion of usefulness of a risk assessment instrument. For example, dynamic instruments that can measure change during treatment may be more useful than static measures than cannot. [↑](#footnote-ref-6)
7. Previously, violence risk assessments relied on unstructured clinical judgement (1st generation risk assessment), which has been found to be a very unreliable method for assessing risk (Andrews, Bonta, & Wormith 2006). [↑](#footnote-ref-7)