Understanding the Relevance of Triarchic Psychopathy for the Reintegration of New Zealand High-Risk Violent Offenders

By

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Note to Reader:

Although the research in this thesis is my own, I conducted it in a lab as part of a community of graduate and postgraduate research students, some of whom previously collected the data used for the analyses in this study. I also received advice and direction from my primary and secondary supervisors. Therefore, I use the word “we” in this thesis to reflect these facts. Further, I use the word “we” in a different context to refer to what is known (or not known) in the wider scientific community.
Abstract

A significant number of male New Zealand high-risk violent offenders are released from prison onto parole each year. Many of these will also present with elevated psychopathic traits which have been hypothesised to cause significant difficulty in desisting from offending, often leading parolees to quickly recidivate or breach parole, and return to prison. Despite personality disorders having pervasive effects on functioning, other reintegration outcomes such as parolee experiences and reconviction risk on parole have previously been unlinked with personality disorders and even less so the specific components of psychopathy. Using an exploratory design, this study firstly investigated the relationships between the triarchic conceptualisation of psychopathy constructs of Disinhibition, Boldness, and Meanness individually with pre-release (Violence Risk Scale, Release Plan Quality, and RoC*RoI), and post-release (Dynamic Risk Assessment for Offender Re-entry, Probation Relationship Quality, Parole Experiences Measure, and recidivism) measures of reintegration outcomes. These measures were completed by a sample of high-risk violent offenders imminently before their release onto parole after serving custodial sentences of two years or more for a violent offence (pre-release), and at two months in the community (post-release). Secondly, the controversial question of whether boldness exacerbates or attenuates negative outcomes on parole over and above disinhibition or meanness was tested. Thirdly, relationships between psychopathy and recidivism mediated by reintegration outcome measures were examined. The triarchic scales were hypothesised to be relevant for reintegration outcomes, with poorer outcomes expected for disinhibition and meanness, and better outcomes expected for boldness. Further, boldness was expected to ameliorate negative outcomes when strongly present. Results indicated that the triarchic scales evinced differential relationships with reintegration outcomes, although boldness revealed non-significant outcomes in opposing directions from those hypothesised. Disinhibition and
meanness evinced expected outcomes with reintegration outcome measures. An interaction effect was found between meanness and reconviction risk on parole at moderate and high levels of boldness; boldness potentiated the effect of meanness on reconviction risk on parole when meanness was already present. Finally, a significant partial mediation was revealed, where disinhibition and recidivism were mediated by parole experiences in three out of four recidivism outcomes. Implications for the theoretical and practical relevance of triarchic psychopathy for the reintegration of high-risk violent offenders, are discussed.
# Table of Contents

Acknowledgements ............................................................................................................. ii

Abstract ................................................................................................................................ iv

Table of Contents .................................................................................................................. vi

List of Tables ........................................................................................................................ x

List of Figures ........................................................................................................................ xi

List of Appendices ................................................................................................................ xii

Chapter 1 Introduction ........................................................................................................ 1

Psychopathy Background ................................................................................................ 4

  Conceptualisation and assessment of psychopathy ......................................................... 5

  The personality-based approach to psychopathy ......................................................... 6

  The dimensional nature of psychopathy ..................................................................... 8

  Psychopathy’s nomological network ......................................................................... 9

  Adaptive traits in psychopathy ................................................................................ 9

  Self-report assessment of psychopathy ...................................................................... 11

The Triarchic Model of Psychopathy .............................................................................. 13

  Research with the Triarchic Psychopathy Model ....................................................... 15

High-Risk Violent Offenders ............................................................................................ 18

Reintegration ...................................................................................................................... 21

  Parole .......................................................................................................................... 24

Chapter 2 Method ............................................................................................................. 30
The Parole Project .......................................................................................................................... 30

Eligibility Criteria .......................................................................................................................... 31

Sample ......................................................................................................................................... 32

Measures ....................................................................................................................................... 35

Pre-release measures ...................................................................................................................... 35

RoC*RoI ......................................................................................................................................... 36

Release Plan Quality scale ............................................................................................................ 36

Violence Risk Scale ....................................................................................................................... 37

Triarchic Psychopathy Measure ................................................................................................... 38

Post-release measures ................................................................................................................... 40

Parole Experiences Measure ....................................................................................................... 40

Relationship Quality Scale .......................................................................................................... 41

Dynamic Risk Assessment for Offender Re-entry ....................................................................... 41

Procedure .................................................................................................................................... 42

Data Collection .............................................................................................................................. 42

Treatment of Data ........................................................................................................................ 47

Psychometric analysis of the TriPM ............................................................................................... 47

Interaction effects ......................................................................................................................... 47

Linear multiple regression analyses .............................................................................................. 48

Mediational analyses .................................................................................................................... 48

Chapter 3 Results ......................................................................................................................... 50
# Psychometric Analysis of the TriPM

Central tendency and dispersion ................................................................. 50  
Internal reliability ......................................................................................... 50  
Bivariate correlations of triarchic scales ...................................................... 51

## Relationships between the Triarchic Scales and Reintegration Measures

Research question 1: Are the triarchic psychopathy scales related with reintegration measures? .......................................................... 53

Bivariate correlations of the triarchic scales and reintegration variables ........ 53

Relationships between the TriPM and recidivism ........................................... 55

Bivariate correlations of the triarchic scales and recidivism ........................... 55

Predictive validity of the triarchic scales in relation to reintegration outcomes  56

Multiple linear regression analyses ................................................................. 57

Research question 2: Does boldness attenuate or exacerbate the effects of meanness or disinhibition? ................................................................. 59

Interaction effects .......................................................................................... 59

Research question 3: Are the relationships between the triarchic scales and recidivism mediated by other reintegration variables? ....................... 61

Mediation analyses ......................................................................................... 61

## Chapter 4 Discussion

Comparing Triarchic Scores with Previous Research .................................... 64

Application of Findings .................................................................................. 65
Triarchic scale relationships with risk measures ...........................................65

Triarchic scale relationships with reintegration outcomes..............................66

Triarchic scales and recidivism........................................................................69

Regression analyses .........................................................................................70

Interaction effects..............................................................................................71

Mediation analyses..............................................................................................72

Implications and Applications ............................................................................73

Limitations and Future Research........................................................................77

References............................................................................................................81

Appendices..........................................................................................................110
List of Tables

Table 1 Descriptive Statistics for the Demographic and Criminal History Variables of the Sample .................................................................34

Table 2 Study Measures, their Data Origins and their Relevant Rating Period .................45

Table 3 Intercorrelations of the Triarchic Scales ........................................................................52

Table 4 Correlations Between the Triarchic Scales and Pre- and Post-Release Measures ....54

Table 5 Correlations between Triarchic Scale Scores and 1-Year Recidivism Measures ......56

Table 6 Regression Analyses for Triarchic Psychopathy Scales and Pre- and Post-Release Study Variables ..................................................................................................................................................57
List of Figures

Figure 1. A graphic representation of the Triarchic Model of Psychopathy, showing the hypothesised interrelationships of the key constructs.................................................................14

Figure 2. Graph of interaction between Meanness and Dynamic Risk Assessment for Offender Re-entry (DRAOR) scores, moderated by Boldness .................................................................60

Figure 3. Base model for testing mediational hypotheses..........................................................63
List of Appendices

Appendix A Table of Hervey Cleckley’s Psychopath Criteria......................................................110

Appendix B Table of Robert Hare’s Psychopathy Checklist Revised (PCL-R) Criteria ......112

Appendix C Table of Mediational Pathways Tested .................................................................115

Appendix D Full Results for Mediational Analyses .................................................................117
Chapter 1 Introduction

“Convicts are human beings, each more or less pieced together from the lessons and struggles of life”

- Richards & Jones, 2004

Every year, 1,933\(^1\) people on average who have committed crimes and served
custodial sentences of two years or more in New Zealand (NZ) prisons are released back into
our communities at the completion of their sentence. Often, these people will be released
prior to the end of their sentence if granted parole. Of the 1,933 offenders released annually,
257\(^2\) (13%) are classed as high-risk violent offenders due to a high risk of recidivism based
on static (unchangeable) risk factors, together with a history of violent offences.

Further, approximately one quarter to a third of all offenders (Hare, 1991; Walters,
2004), and as many as 81% of high-risk violent offenders (Dickson, Polaschek, & Casey,
2013) score above the diagnostic cut score on one of a suite of psychological assessment
instruments developed to score psychopathic personality traits and behaviours; the
Psychopathy Checklist-Revised (Hare, 1991), and its derivatives. Given the importance of
psychopathy to criminal outcomes, this thesis examines associations between psychopathy
and pre- and post-release factors for high-risk violent offenders.

Psychopathy is a serious personality disorder that has traditionally been strongly
linked with reoffending, earlier age of onset of criminal career, longer duration of criminal
lifespan, higher frequency of offending, and quicker latency to recidivism (DeLisi, 2009;
Dickson et al., 2013; Fox, Jennings, & Farrington, 2014; Hare, 1991; Serin, 1996; Vaughn &

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\(^1\) Average NZ offenders released from a sentence of two years plus (2012-2017; Department of Corrections).

\(^2\) Average NZ offenders released from sentences of two years plus for a violent offence, with a RoC*RoI of
>.65 (2012-2017; Department of Corrections).
DeLisi, 2008; Wilson, 2003). Recent psychopathy research however has shown that these negative findings have usually been more strongly linked to Factor 2 PCL-R scores, which survey externalising antisocial behaviour and problematic impulsivity—traits which are not unique to psychopathy and therefore which provide very little heuristic value to the label ‘psychopathy’ (Leistico, Salekin, DeCoster, & Rogers, 2008; Poythress et al., 2010; Yang, Wong, & Coid, 2010). Furthermore, the key personality features of psychopathy captured in Factor 1 of the PCL-R (features such as grandiose sense of self-worth, and callousness/low empathy) consistently fail to relate with negative interpersonal or reoffending outcomes at all, or at best only weakly (Olver & Wong, 2011; Walters, 2012).

Daly (2017), using a sample of treated high-risk violent men, investigated the predictive validity of various treatment outcomes using a screening version of the PCL-R; the Psychopathy Checklist: Screening Version (PCL:SV: Hart, Cox, & Hare, 1995). Daly found PCL:SV Part 1 and its facets were associated with significantly higher rates of removal from treatment, poorer working relationships with treatment staff, and lower engagement in treatment. Further, Part 2 and its facets were strongly associated with higher overall dynamic risk scores (pre-treatment), and reconvictions post-treatment, when compared with Part 1 variables. However, higher PCL:SV total scores were not associated with higher likelihood of treatment withdrawal, and could not discriminate the treatment-removed men from the treatment-withdrawers as could the PCL:SV Part 1 and its facets. Opposing associations like these often eventuate between psychopathy factors and external correlates upon closer inspection (Lilienfeld et al., 2012), as would be expected if psychopathy were a combination of covarying constructs of normal-range personality traits (Lilienfeld, 1994, 1998). In summary, incremental knowledge encourages researchers to present a more nuanced view of psychopathy than simply that of a marker of serious reoffending risk (Drislane & Patrick 2017; Skeem et al., 2011). One solution to the issue of viewing psychopathy as a universally
inauspicious disorder is to scrutinise the relationships of the components of psychopathy with external correlates separately, rather than the correlates of total scores only. In this manner, heterogeneous relationships are revealed rather than cancelling each other out (Lilienfeld, Watts, Smith, Berg, & Latzman, 2015; Lilienfeld, Smith, Sauvigné et al., 2016).

Most high-risk violent offenders with psychopathic traits will eventually be released; regardless of whether they have reduced their risk of reoffending through treatment, or are interested in reintegration at all. It is imperative then, that the reintegration of former offenders is successful. Reintegration is the process of “assist[ing] offenders to re-enter society and ultimately to become productive and accepted citizens” (Ward, 2010, p. 44). The ultimate goal of rehabilitation and reintegration is desistance; which Gottfredson and Hirschi (1990) describe as the process of moving from an offending state to a non-offending state.

Past reintegration research has focused on offenders’ motivation to change and to desist from crime; their ability to meet immediate and fundamental needs such as accommodation; and the benefits of prosocial relationships and employment, staying free of substances, and ensuring access to adequate education and training opportunities (Andrews & Bonta, 2010; Graffam, Shinkfield, & Lavelle, 2014; Laub & Sampson, 1993; Robson, 2015; Severson, Bruns, Veeh, & Lee, 2011). No research to date has looked at whether personality disorders affect successful reintegration or not. Psychopathy is one such configuration of personality disorder that could inform our knowledge of successful reintegration. There is a potentially erroneous assumption in the correctional and forensic field based partly on the bank of previous research that psychopathy is inevitably linked with poorer outcomes on parole. In this study we will directly test this assumption. The next sections will first discuss the requisite background and relevant research for several disparate yet related areas: the conceptualisation and assessment of psychopathy, the more recent triarchic conceptualisation
of psychopathy, high-risk violent offenders, and reintegration. Finally, several hypotheses and exploratory research questions are suggested.

**Psychopathy Background**

Psychopathy refers to a severe personality pathology incorporating a flagrant disregard for social norms with distinctive interpersonal and affective deficits (Benning, Patrick, Salekin, & Leistico, 2005). Individuals with psychopathic personality traits typically exude superficial charm and grandiosity, yet hold others and their welfare in contempt, often suffer from a poverty of emotion including low fear and empathy, and usually, engage in antisocial behaviour and sometimes criminal behaviour with ambivalence to the threat of certain punishment (Cleckley, 1976; Lilienfeld et al., 2012). Lykken (1995) posited psychopathy as a failure of socialisation due to psychological vulnerabilities akin to those Moffitt (1993) discovered in her Life-Course Persistent (LCP) offenders. The LCP offender group subsumes high-risk violent offenders, therefore, many LCP offenders will also have significant psychopathic traits (Moffitt, Caspi, Harrington, & Milne, 2002). Indeed, stigmatising labels such as “chronic offender”, “serious, violent”, “life-course persistent” and “career criminal”—all terms used to describe LCP offenders—are interchangeable with the label “psychopath” (Vaughn & DeLisi, 2008).

Although the societal prevalence is small, individuals with psychopathic traits within correctional institutions are overrepresented. Inmates with psychopathic traits are disproportionately responsible for a large amount of all crime, including a disproportionate amount of all violent crime (Hare, 1991; Hemphill, Hare, & Wong, 1998). The treatment and reintegration focus for those with heightened psychopathic traits is more recent, as psychopathy has typically demanded a justice or legal response only, in order to decrease risk to the community (Benning, Patrick, Salekin et al., 2005; Morse, 2008; Skeem et al., 2011).
Despite over 200 years of inquiry into psychopathy, many questions remain contested or unanswered. For example, researchers have debated whether psychopathy is categorical or taxonic, and whether the personality approach is the best way to investigate it (Lilienfeld, Watts et al., 2015). Whether or not adaptive traits can be included in a disorder that is at its heart pathological, forms another area of debate (Lilienfeld, Smith, & Watts, 2016), as does the necessity of criminality to the disorder (Skeem & Cooke, 2010). Further, whether or not psychopathy can be validly assessed by self-report tends to polarise opinions (Walters, 2006). The following subsections aim to provide a brief history of the conceptualisation of the condition, summarise key points under each of the aforementioned areas of debate, and offer an alternative model which purports to integrate knowledge from across the psychopathy field: the triarchic conceptualisation of psychopathy.

**Conceptualisation and assessment of psychopathy.** The study of psychopathy as a clinical concern dates back to the early 1800s. ‘Psychopaths’ were initially described as suffering a kind of mania without delirium (Pinel, 1801), or as having a disease originating from an underlying “moral depravity” (Rush, 1812). Subsequently, the McCords’ work in prisons highlighted the cold, vicious, and predatory natures they saw as characteristic of psychopaths (McCord & McCord, 1964). At the end of the 1960’s, Robins had developed what is now known as Antisocial Personality Disorder (APD/ASPD: 1966/1978), and Robert Hare—the biggest figure in contemporary psychopathy—had begun researching the disorder.

The initial version of the Psychopathy Checklist (PCL) was developed by Hare based on a checklist of 16 criteria (see Table 1 of the appendices) derived from Cleckley’s clinical observations of 15 cases of psychopathy in psychiatric patients (Hare, 1980). The original PCL consisted of 22 diagnostic criteria, later whittled down to 20 in the Psychopathy Checklist-Revised (PCL-R: Hare, 1991). The PCL-R has a two-factor, four facet structure (see Table 2 of the appendices), and is scored by a clinician trained in its administration.
Scoring is typically conducted by clinical interview, plus a review of file and collateral information. In research settings it is appropriate to score clients on file information only with a lower cut-off score of 25 to take into account the lack of observation of clinically-relevant behaviours (Hare, 2003).

Internationally, the assessment of psychopathy remains dominated by the PCL-R and its derivatives (Hare, Black, & Walsh, 2013; Neal & Grisso, 2014), and therefore by the conceptualisation of a unidimensional construct (Crego & Widiger, 2014a; Neumann, Hare, & Newman, 2007). Further, because PCL-R tools tend to have good to strong predictive ability with offending populations, they are often used as risk assessment (probabilistic) tools for future general and violent offending (Neal & Grisso, 2014; Shepherd & Lewis-Fernandez, 2016), despite not being developed for this purpose.

However, the PCL-R suffers from several serious limitations. Firstly, the PCL-R’s development was atheoretical (Poythress et al., 2010). For example, the PCL-R conflates psychopathy with criminality through its reliance on items referring to previous criminal behaviour, which does not co-occur in all psychopaths (Brinkley, Schmitt, Smith, & Newman, 2001; Skeem & Cooke, 2010). This makes the PCL-R redundant in non-forensic populations (Lilienfeld, 1998). Secondly, it has poor discriminant validity between ASPD and psychopathy itself (Venables, Hall, & Patrick, 2014; Wall, Wygant, & Sellbom, 2015). Thirdly, the PCL-R’s coverage of adaptive traits is lacking (Patrick et al., 2009). Finally, the PCL-R performs more poorly at predicting violent reoffending in most cases than if only age and criminal history variables were used (Walters, 2012), and considerably poorer than the Level of Service Inventory – Revised Correctional staff-rated risk assessment tool (Gendreau, Goggin, & Smith, 2002).

The personality-based approach to psychopathy. While personality traditionally is regarded as remaining stable across the life-course after becoming “fixed” somewhere around
the age of 18 years (James, 1890; Moffitt, 1993, p. 684), there is growing research positing that even the most severe of personality disorders and criminal trajectories can change over time (Blonigen, 2010; Caspi, Roberts, & Shiner, 2005; Clarkin, Cain, & Livesley, 2015; Polaschek, 2014). Indeed, a pilot programme of intensive psychological treatment for high-risk violent offenders with severe personality pathology in NZ has shown promise (Wilson & Tamatea, 2013). In predicting who will need extra support for successful reintegration and what that support should entail, it is important to understand as many personality and behavioural clues together as possible. The personality approach states that studying behaviour in isolation cannot adequately explain, or assess, personality constructs (Lilienfeld, 1994).

Psychopathy should be studied in reference to the general personality network (Benning, Patrick, & Iacono, 2005; Drislane, Patrick, & Arsal 2014; Lilienfeld, Smith et al., 2016; Stanley, Wygant, & Sellbom, 2013). This is because in ascertaining where the boundaries naturally fall for any given disorder, it is instructive to look at the range of what would be considered normative functioning in the same context (Benning, Patrick, Blonigen, Hicks, & Iacono, 2005; Lynam & Widiger, 2007; Vaughn & DeLisi, 2008). Further, psychopathic traits are located on a continuum together with normal-range personality traits (Drislane et al., 2014; Hare & Neumann, 2008); all members of the general population also manifest ‘psychopathic traits’ and tendencies to varying degrees (Poythress & Hall, 2011). Some suggest that reducing psychopathy to a description of its scale associations with broad personality domains—such as the Five Factor Model (FFM: McCrae & Costa, 2003) domains: Openness, Conscientiousness, Agreeableness, Narcissism, and Extraversion—concludes the discussion (Miller & Lynam, 2015). But this treatment of data conceals significant opposing relationships between the individual components of psychopathy, and the underlying items of the personality domains. Researchers have long sought, and failed, to
find the origin of psychopathy arising from a single defective core trait, such as coldheartedness; but the idea of a singular responsible trait is a fallacy (Miller & Lynam, 2015).

**The dimensional nature of psychopathy.** This failure to discover one trait that underpins all of psychopathy lends support to the conceptualisation of psychopathy as a constellation of normal-range personality traits combining in specific, maladaptive ways to produce a pathologic presentation; otherwise known as a compound trait, trait-based disorder, or syndrome (Benning, Patrick, Blonigen et al., 2005; Lilienfeld, 2013; Lilienfeld & Andrews, 1996; Lilienfeld & Fowler, 2006; Lilienfeld, Watts et al., 2015; Lilienfeld et al., 2012; Lilienfeld & Widows, 2005; Marcus, Fulton, & Edens, 2013; Miller, Lamkin, Maples-Keller, & Lynam, 2016; Miller, Lynam, Widiger, & Leukefeld, 2001; Strickland, Drislane, Lucy, Krueger, & Patrick, 2013). Dimensional models, as opposed to taxonic models, are able to accommodate differential ðbiologies, which in turn explain variation in presentation symptoms and severity (Lynam & Miller, 2015; Lilienfeld, Watts et al., 2015).

Despite prior forensic studies claiming to have identified a taxonic structure for the PCL-R and by extension psychopathy (Harris, Rice, & Quinsey, 1994; Harris, Skilling, & Rice, 2001), methodological issues were revealed in the initial study and its follow-up (see Edens, Marcus, Lilienfeld, & Poythress, 2006). Further replication studies also failed to find evidence supporting a discrete natural class of psychopathic disorders (Edens et al., 2006; Marcus, John, & Edens, 2004). Finally, all attempts to factor analyse the PCL-R have resulted in either two, three or four-factor models, hinting at the multidimensional properties underlying the higher-order structure (Skeem et al., 2011; Patrick et al., 2009; Walters, 2012). Indeed, Hare’s own four factor solution is the generally accepted PCL-R structural model (Hare & Neumann, 2006).
The large body of data opposing the taxonic nature of psychopathy lends support to our study in that looking further at the personality traits that constitute psychopathy is important, rather than focusing on whether or not one is ‘psychopathic’ (Edens et al., 2006; Guay, Ruscio, Knight, & Hare, 2007; Walters, Brinkley, Magaletta, & Diamond, 2008).

**Psychopathy’s nomological network.** Through an iterative process of broadening and affirming linked concepts, a nomological network connects observed variables in order to reveal a latent theoretical construct, such as psychopathy (Benning, Patrick, Salekin et al., 2005; Cronbach & Meehl, 1955). The “sharp disagreement” around whether or not adaptive traits should be allowed to covary with maladaptive traits in psychopathy, centres around the adaptive traits’ divergent relations with typical external correlates of psychopathy (Lilienfeld, Watts et al., 2015, p. 594). Opponents say, to earn their place, adaptive traits should predict or evince associations with antisocial behaviours that co-occur with healthy functioning, for example, interpersonal manipulation, or sexual promiscuity (Berg, Lilienfeld, & Sellbom, 2017; Lynam & Miller, 2012, 2015). However, we adopt the view that because psychopathy is a constellation of normal-range traits that covary in specific ways, it *can* have both adaptive and maladaptive traits situated within its network and still present overall as a maladaptive disorder (Lilienfeld et al., 2012; Patrick, Venables, & Drislane, 2013). Covariation accords with the notion of people having personality areas of relative weakness and strength, rather than global personality function or dysfunction. The following subsection will discuss the scales developed to measure these adaptive traits.

**Adaptive traits in psychopathy.** All theoretical psychopathy models include traits that reference deficient behavioural self-regulation, and traits which fall under the broad term ‘antagonism’, to varying degrees of emphasis (Patrick et al., 2009; Vize, Lynam, Lamkin, Miller, & Pardini, 2016). A third set of traits dealing with resiliency, tolerance for uncertainty, and an absence of negative emotionality, are less agreed upon. Adaptive traits
represent the conceptual elements of a latent construct which has been variously named Fearless-Dominance, Emotional Stability, and Boldness: each representing scales that tap into similar concepts, but which are not identical. Lilienfeld and colleagues argue that it is only through the adaptive traits that the full picture of psychopathy is realised when significant levels of impulsive externalising traits, or callous traits, are also present (Berg et al., 2017; Blonigen, 2013; Lilienfeld, et al., 2012).

The Psychopathy Personality Inventory-Revised (PPI-R: Lilienfeld & Widows, 2005), was developed to provide a comprehensive assessment of the interpersonal and affective features of psychopathy without a reliance on criminal behaviour (Lilienfeld, 1994). The PPI-R’s first factor, Fearless-Dominance (FD), comprises the subscales Fearlessness, Social Potency, and Stress Immunity (Lilienfeld & Widows, 2005). High-scorers on FD are more likely to have good psychological and social abilities, but also narcissistic tendencies, low empathy, and show thrill-seeking behaviour (Patrick et al., 2009). FD correlates only with Factor 1 (and the Interpersonal facet) of the PCL-R, and only moderately, $r = .30$ (Patrick et al., 2009). However, the low correlation does not equate with the PPI-R being an invalid operationalisation of psychopathy, merely a different operationalisation of it: just as the authors intended (Crego & Widiger, 2014b; Lilienfeld & Andrews, 1996).

Similarly, the nine Triarchic Psychopathy Measure Boldness subscales (called facets in the triarchic conceptualisation) include Optimism, Intrepidness, Resilience, Courage, Dominance, Persuasiveness, Tolerance for Uncertainty, Social Assurance, and Self Confidence. The developers of the triarchic conceptualisation of psychopathy state that boldness entails “a capacity to remain calm and focused in situations involving pressure or threat, an ability to recover quickly from stressful events, high self-assurance and social efficacy, and a tolerance for unfamiliarity and danger” (Patrick et al., 2009, p. 926). Boldness is strongly related, both conceptually and empirically, with FD (Sellbom & Phillips, 2013;
Stanley et al., 2013). In prison samples, boldness and FD correlate $r = .77-80$ (Patrick, 2010; Venables et al., 2014). In terms of FFM domains, boldness is strongly negatively related with neuroticism, and strongly positively related to extraversion. It also evinces weak to moderate correlations with conscientiousness, agreeableness, and openness (Miller et al., 2016). Generally, FD and boldness are not correlated with PCL-R Factor 2 and other externalising or antisocial traits, or are only weakly correlated (Lilienfeld et al., 2012; Patrick, 2010; Venables et al., 2014).

Emotional Stability (ES) within the self-report Elemental Psychopathy Assessment (EPA; Few, Miller, & Lynam, 2013) represents the scales of Unconcern, Self-Contentment, Self-Assurance, and Invulnerability. There is a paucity of literature available on the EPA due to its recent development. However, the authors found FD scales (Fearlessness, Social Potency, and Stress Immunity) to be mirrored by high levels of Unconcern, Self-Contentment, Self-Assurance, and Invulnerability from the EPA (Lynam et al., 2011). Further, ES was significantly related with FD ($r = .67$) in a prison sample, (Few et al., 2013), and $r = .57$ in an undergraduate sample (Wilson, Miller, Zeichner, Lynam, & Widiger, 2011).

The following subsection looks at the research in regards to the self-report assessment of psychopathy.

**Self-report assessment of psychopathy.** The first measure developed to survey the self-report assessment of psychopathy was the Self-Report Psychopathy scale (SRP: Hare, 1985b). Hare concluded that self-report assessment was fruitless because psychopaths gave contradictory information to that recorded in their files (1985a). Consistent with Hare’s finding, there is a conception that people with psychopathic traits—such as grandiosity, deceitfulness, and a lack of insight into behaviour—may be more inclined to use malingering and other response styles that reflect impression management (Gatner, Douglas, & Hart, 2016; Lilienfeld & Fowler, 2006). However, studies have shown that psychopaths do not
engage in impression management any more than the average person, and in fact they may be more inclined to create a negative impression (Lilienfeld, 1994; Miller, Jones, & Lynam, 2011; Ray et al., 2013) perhaps due to their indifference to others’ opinions (Benning, Patrick, Hicks, Blonigen, & Krueger, 2003).

Walters (2006) found that self-report measures had comparable predictive validity for recidivism with the best available forensic measures at the time, including PCL and PCL-R. Regression analyses in this study revealed that self-report measures accounted for unique variance in predicting recidivism outcomes. Further evidence has shown that self-rated reoffending risk ratings can be just as predictive, or possibly even more so, than numerous risk assessment tools (Yang, Wong, & Coid, 2010). Similarly, self-report data has been found to add incremental utility to brief violence risk assessment tools, whereas brief risk assessment tools added no further predictive accuracy to self-report data (Skeem, Manchak, Lidz, & Mulvey, 2013). Moreover, Van den Brink and colleagues (2015) found that self-rated risk scores improved the predictive accuracy of re-offending beyond a case-manager rated risk assessment tool.

Recently, in order to combat response management issues such as careless or random responding on the Triarchic Psychopathy Measure (TriPM: Patrick, 2010), the Triarchic Assessment Procedure for Inconsistent Responding (TAPIR: Mowle et al., 2016) was created with a derivation sample of mixed-gender undergraduates and offenders (N=2,138). The TAPIR was able to differentiate between randomly generated data, and genuine responding (AUC=.83-.99), as well as between genuine responding and responses where half of the answers had been replaced with random responses, with high levels of accuracy (AUC=.71-.93), and further in six non-English language speaking samples (AUCs=.88-.97: Kelley et al., 2017). Researchers warn that when using self-report instruments one should include validity
scales and corroborate information gained, particularly in regards to post-treatment gains (Lilienfeld & Fowler, 2006).

In summary, self-rated assessment is still currently underutilised in correctional settings (Skeem et al., 2013). However, the preponderance of evidence states that we can now be more confident in using self-report instruments to measure even such personality disturbances as psychopathy. We turn now to describing a framework posited to integrate much of the discrepant knowledge of psychopathy from the field, a putatively more ‘Cleckleyan’ conceptualisation of the condition.

The Triarchic Model of Psychopathy

In an attempt to weave a more coherent picture of psychopathy from the disparate operationalisations abounding at the time, and to make the assessment of psychopathic traits more efficient and simplified, Patrick and colleagues (2009) developed the triarchic model of psychopathy (Lilienfeld, Watts, et al., 2015) and the Triarchic Psychopathy Measure (TriPM; Patrick, 2010). The triarchic model has broadened the conceptualisation and assessment of psychopathy in general (Evans & Tully, 2016; Crego & Widiger, 2014a; Weidacker, O’Farrell, Gray, Johnston, & Snowden, 2017), and provided a roadmap for the study of neurobiological causal mechanisms in the ætiology of psychopathy (Patrick et al., 2012).

Key theories and concepts that underpin the triarchic conceptualisation are: Lykken’s (1957) low fear hypothesis; Fowles and Dindo’s (2009) dual-pathway model; failure of attachment, equifinality, and multifinality from developmental psychology; and, the coercion hypothesis (see Patrick et al., 2009 for a review). It is from this strong platform that three overlapping phenotypic constructs are proposed, which, via specific interactions, result in the presentation of psychopathy. A simplified graphic representation of the triarchic constructs is reproduced in Figure 1, below. Patrick (2010) proposes Disinhibition as the maladaptive
phenotypic expression of a difficult temperament genotype, reflecting poor planning, deficient behavioural-restraint and impaired affect regulation; Meanness as the pathological phenotypic expression of a low fear genotype reflecting low empathy, disdain for interpersonal attachments and ascendance through cruelty; and Boldness as the adaptive phenotype of a low fear genotype reflecting calmness under pressure, immunity from stressors and high social efficacy. TriPM ‘psychopathy’ requires the manifestation of disinhibition, as well as that of either meanness or boldness (Patrick et al., 2009).

Figure 1. A graphic representation of the Triarchic Model of Psychopathy, showing the hypothesised interrelationships of the key constructs (adapted from Patrick et al., 2009).

The TriPM was not an attempt to emulate the PCL-R. Instead the TriPM was aiming to provide a more nuanced, personality-based assessment of psychopathy that did not incorporate criminal behaviour as a requisite core feature, and a return to a more Cleckleyan psychopathy prototype (Patrick et al., 2009; Weidacker et al., 2017). From the triarchic perspective, the PCL-R has significant coverage of disinhibition, via items from the ‘impulsive behavioural style’ facet of Factor 2, and meanness, via items from both the ‘affective’ facet of Factor 1 and the ‘antisocial’ facet of Factor 2. However, the PCL-R has much less coverage of boldness, via items of the ‘interpersonal’ facet of Factor 1 in particular (Hall et al. 2014; Benning, Patrick, Salekin et al. 2005; Patrick et al. 2009; Venables et al., 2014).
The triarchic conceptualisation views psychopathy as a dimensional syndrome (Patrick et al., 2009). In this way, it provides no cut-off score for the diagnosis of ‘psychopathic/non-psychopathic’, opting instead to provide areas of focus for intervention, engagement, and treatment. The TriPM offers two future treatment methods—which the authors note are not currently ready for implementation but require more research—with specific treatment foci for elevations on each of the triarchic constructs (Patrick et al., 2012).

The TriPM contains a relatively short 58 items, and being self-report, requires no lengthy review of file histories or corroborative reports (Patrick, 2010). The TriPM therefore can be quickly and cheaply administered, and is useful both with imprisoned and community populations. The TriPM improves upon other psychopathy conceptualisations in several ways: via its empirically-based theoretical derivation; its quick, self-report administration; its non-reliance on criminal behaviour; its coverage of adaptive traits; and, its ability to differentiate psychopathy from other psychopathology. There has been a proliferation of research on the TriPM since its conception, with community participants and university students, and some research with incarcerated populations; however there has been no research to date utilising the TriPM with solely high-risk violent offender (HRVO) samples, or intensively treated samples. We now highlight some key TriPM literature relevant to our study.

**Research with the Triarchic Psychopathy Model.** Several studies have investigated the external correlates of the TriPM in samples that included HRVO. For example, in a sample of 141 male detention centre inmates, of which 7% were incarcerated for violent offences, the TriPM, the Psychopathic Personality Inventory-Short Form (PPI-SF: Lilienfeld & Hess, 2001), and measures of narcissism, interpersonal reactivity, and the Big Five personality traits were administered (Stanley et al., 2013). Consistent with triarchic theory, boldness alone predicted FD, and meanness alone predicted coldheartedness. Further, both
meanness and disinhibition were significant predictors of impulsive antisociality. Both boldness and meanness were positively and significantly related with the narcissism scale, and boldness and meanness were correlated with expected subscales of the empathy measure, but not disinhibition. Further, excepting one subscale of the narcissism measure, the TriPM scales added incremental predictive power (explaining an extra .06-.26 variance; \(p < .01\)) to each criterion measure. The median amount of incremental change the TriPM scales added beyond PPI-SF scale scores was an additional 12% variance.

Further, in a sample of 209 female prisoners (46% imprisoned for homicide and violent offences), Sellbom and Phillips (2013) administered three psychopathy measures including the TriPM, together with the Behavioural Inhibition Scale/Behavioural Activation Scale (BIS/BAS: Carver & White, 1994), the Emotionality-Activity-Sociability-Impulsivity Scale (EASI: Buss & Plomin, 1984), and scales measuring narcissism, Machiavellianism, and emotional empathy. As hypothesised, boldness captured unique variance in FD, and was preferentially associated with thrill-seeking, low behavioural inhibition, and narcissism. Meanness was able to explain variance in all psychopathy measures, especially factors referencing cold and callous features, and was associated with Machiavellianism, deficient empathy, and low behavioural inhibition. Finally, disinhibition was preferentially associated with impulsivity, carefree-nonplanfulness, and fun seeking.

Weidacker et al. (2017) looked at the TriPM and a measure of impulsivity (UPPS-P: Lynam, Smith, Whiteside, & Cyders, 2006) in two samples of male community (\(N=81\)), and imprisoned (\(N=68\)) participants (49% violent offenders). The authors found that boldness was significantly correlated with sensation-seeking and perseverance, and low negative urgency. Disinhibition was correlated with both negative and positive urgency, and poor planning, while meanness was related with most types of impulsivity. The differential findings for the TriPM scales somewhat explain how some individuals with psychopathic traits use
instrumental violence entailing significant planning and perseverance (Weidacker et al., 2017).

Further studies including significant numbers of HRVO have investigated the predictive ability and incremental validity of the triarchic scales. Venables and colleagues (2014) found that TriPM boldness added incremental predictive ability beyond meanness and disinhibition in predicting PCL-R psychopathy (particularly the Interpersonal facet), but not ASPD, in two samples of offenders from a medium security prison (N=157), and a substance use treatment programme (N=169). Wall and colleagues (2015) further investigated the ability of boldness to differentiate between PCL-R psychopathy and ASPD beyond the contribution of disinhibition and meanness, in a sample of 152 male medium-security inmates (including 53% violent offenders). The authors found that boldness accounted for incremental variance in predicting PCL-R Factor 1 (Interpersonal/Affective) scores, and Facet 1 (Interpersonal) scores, beyond ASPD scores.

Several groups have developed new triarchic scales using items from other personality measures. This allows the estimation of population prevalence rates from longitudinal data using broadband personality measures, for example, the FFM. Accordingly, triarchic scales have been developed and validated on both community and inmate samples from the Multidimensional Personality Questionnaire (MPQ: Patrick, Curtin, & Tellegen, 2002); the Minnesota Multiphasic Personality Inventory-2-Restructured Form (MMPI-2-RF: Ben-Porath & Tellegen, 2008); the PPI; and, the PPI-R (Brislin, Drislane, Smith, Edens, & Patrick, 2015; Brislin et al., 2017; Hall et al., 2014; Kutchen et al., 2017; Sellbom et al., 2016; Sellbom, Wygant, & Drislane, 2015). In each study, the authors reported the newly created triarchic scales showed good to excellent internal consistency, provided additional construct validation for the TriPM, and evinced theoretically and conceptually expected relationships with external correlates including normal-range personality traits.
High-Risk Violent Offenders

The criminal behaviour of individuals classed as high-risk violent offenders (HRVO) causes significant harm to communities, often incurring harsh custodial sentences. Violent offences include: homicide, assault and sexual offences, kidnapping and robbery, threatening behaviour, and damage to some personal or household property (Ministry of Justice, 2017). The HRVO classification is due to having a score at or above 0.65 on the RoC*RoI—therefore, being at a high risk of reoffending within five years of release from prison—as well as having incurred a violent index offence (Polaschek, 2011).

Consistent with other colonised territories, the demography of HRVO in NZ is heavily over-represented by young males of indigenous Māori descent, who themselves have experienced generations of entrenched systemic and institutional violence\(^3\). In addition, from extensive research with LCP offenders who subsume HRVO, and from clinical experience (N. Wilson, personal communication, September 22, 2016), it appears that HRVO tend to be born into impoverished communities; grow up in an environment that includes antisocial role models, peers, family members and partners; are strongly affiliated with gang members or in gangs themselves; often present with neurological, mental health, and developmental challenges and difficult temperaments; have parents with little resources and similar challenges and temperaments; and often come from homes where multiple forms of violence are regularly experienced (Moffitt, 1993, Moffitt et al., 2002). Typically, HRVO do not fare well academically, find obtaining and maintaining stable work difficult, and are imprisoned multiple times before adulthood, adding to the difficulties of going straight on release from prison (Moffitt et al., 2002).

\(^3\) The full history of the colonisation of Aotearoa and its effects on tangata whenua are outside the scope of this thesis, however, these effects are significant. See Borell, Moewaka Barnes, and McCreanor (2017) for a review.
HRVO are versatile in their offending, engaging in both minor, serious, and violent offences across their criminal careers, and their criminal efforts are pervasive across the life-span (Moffitt et al., 2002; Polaschek & Kilgour, 2013; Wilson, 2004). Once released, a significant proportion (39-89%) of individuals at a high risk of reoffending are returned to prison within the first 60-100 days of release; half of those within the first three months (Gwynne, 2016; Nadesu, 2007). The costs associated with keeping a prisoner incarcerated for one year are over NZD$91,000 (Department of Corrections, 2011 figures), meaning that being fiscally responsible also means reducing the likelihood of individuals returning to prison. One investment the government has made to reduce reoffending is to treat HRVO while in prison.

Montgomery House was first established in 1987 for this purpose and continues today as Tai Aroha (Polaschek, Wilson, Townsend, & Daly, 2005). Subsequently, the Department of Corrections became more serious about the targeted reduction of violent offending when it piloted its first intensive cognitive behavioural treatment (CBT) programme, the Rimutaka Violence Prevention Unit (VPU), in 1998 (Polaschek, Yesberg, Bell, Casey, & Dickson, 2015). Following the success of the pilot initiative, the VPU was renamed Te Whare Manaakitanga (TWM) and three further units were added (Polaschek & Kilgour, 2013). The four units remain the Department’s most successfully evaluated programmes to date (see Polaschek & Kilgour, 2013 for more information about the programme). Approximately 66% of all men who commence the programme graduate as ‘completers’ (Polaschek, 2010).

A significant proportion of NZ HRVO score high enough on the PCL-R or PCL:SV that a clinical diagnosis of psychopathy is warranted. For example, 36% of retrospectively-rated violent offenders in the Rimutaka VPU scored 20 or more on the PCL:SV, a score considered comparable with the cut score of 30 on the PCL-R (Polaschek & Bell, 2008). Further, 56% of VPU participants scored over 20 on the PCL:SV following a change to the
minimum RoC*RoI entry score for VPU entry (Polaschek, 2008). Finally, in a sample of 49 VPU completers, 81.2% scored over 18 on the PCL:SV (Dickson et al., 2013), which is indicative of a diagnosis of psychopathy (Hart, Cox, & Hare, 1995).

Further NZ research has made a small but noteworthy contribution to the HRVO literature. Wilson (2003) validated the use of the PCL:SV in predicting general and violent recidivism and reimprisonment with a sample of HRVO. Of the 199 participants, 34% scored >18 on the PCL:SV, indicating a strong likelihood of psychopathy. Wilson further discovered that scoring higher than 16 on the PCL:SV led to being imprisoned six times faster than low-scoring. Interestingly, of 32 ‘false positives’ in the study (those who were predicted to recidivate within five years but did not), many had purposely adapted their behaviour and environments. For example, 14 false positives were followed up via structured interview and psychometric test battery, which revealed that these offenders had purposely changed their geographic location, reduced substance use, increased social support networks and decreased time spent with antisocial peers (Wilson, 2003).

TWM’s STU programme was first evaluated in 2004 after having produced 22 graduates since opening as the Rimutaka VPU in 1999. Graduates’ violent recidivism rates were compared with a non-matched, convenience sample, and showed a significant reduction ($d = .87$) in violent recidivism rates with a large effect size (Polaschek et al., 2005). In a subsequent TWM evaluation, a small significant effect was again found for ‘any recidivism’ ($Φ = .19$), and small but insignificant effects ($Φ = .11$ and $.05$) were found for ‘violent recidivism’ and ‘reimprisonment for violence’, respectively (Polaschek, 2011). At that time, ‘high-risk’ meant those with a RoC*RoI of 0.40 or greater. Effect sizes are likely to be significant, and stronger, in high-risk groups with a RoC*RoI of .70 or greater (Dickson et al., 2013). Finally, an evaluation of all four HRSTUs using a quasi-experimental design compared graduates to matched, untreated men (Kilgour & Polaschek, 2012). This evaluation
too, evinced small but significant reductions in recidivism. More recent studies with TWM completers show that overall, graduates of intensive treatment programmes for HRVO have a decreased likelihood of breaching parole, gaining any further reconvictions, gaining new violent reconvictions, or serving new terms of imprisonment compared with untreated men (Polaschek et al., 2015).

The success of the STUs led to the development of the High-Risk Personality Programme (HRPP) in NZ (Wilson & Tamatea, 2013). The HRPP is an intensive CBT programme for medium-high security offenders with scores over 27 on the PCL-R, or high levels of psychopathology. The pilot programme evinced positive results; the men reduced misconducts to zero during the programme and significantly reduced misconducts in the months following returning to general population; 80% of the men reduced their security classification; all reduced their VRS scores; and, 40% of the men went on to further intensive treatment (Wilson & Tamatea, 2013). However, the authors reported that treatment gains could all be undone by returning to unstable environments, relying on maladaptive schema, maintaining gang affiliations, and having poor release plans (Wilson & Tamatea, 2013). In summary, there is now enough evidence to conclude that even HRVO with psychopathic traits can decrease their level of dynamic risk, reduce misconducts and offending frequency and severity, and evidence a higher commitment to desistance, when effective interventions are provided (see Andrews & Bonta, 2010). The next major section turns to consider reintegration and the relevance of parole to our study.

Reintegration

Reintegration, variously named ‘re-entry’ and ‘resettlement’, is a complex area of correctional service as it necessarily has a bearing on every area of life (Maruna & Immarigeon, & LeBel, 2004). As an event, re-entry refers to the point at which an individual is released from prison, and as a process, refers to a period that begins before release, and
persists long afterward, in which ex-prisoners are reintegrated back into the communities they were separated from through imprisonment (Maruna et al., 2004). Maruna and colleagues add that reintegration includes “everything” (every intervention, support service, and security measure) that is put in place after release in order to allay recidivism (p. 6).

People released from prison will have a history of criminal behaviour, but many will have no, or a reduced, history of prosocial behaviours or experiences which would influence their future behaviour in a positive way (Moffitt et al., 2002). Therefore it will be harder for HRVO to ‘go straight’ when deviant living is the entrenched norm (Maruna et al., 2004). Systemic (legal and institutional) barriers make the transition arduous and deflating even for positive individuals who desire change (Richards & Jones, 2004). Although no matter what we do in the area of reintegration, all but a small minority of the most hard core offenders will desist on their own; by natural maturation, through treatment or good mentoring, via settling down, or burning out (Maruna et al., 2004; Sampson & Laub, 2016; Serin, Peters, & Barbarree, 1990). Idly waiting for individuals’ ‘spontaneous remission’ from offending is not an option though, due to the significant fiscal and victim impacts meanwhile (Maruna et al., 2004).

Serin encourages that improvements in reintegration results will be achieved by using more systematic risk assessment, improving connections with community interventions, and providing humane and competent human services (Lloyd & Serin, 2012). Improving risk assessment means a movement away from considering only risk factors, and an acknowledgement that protective factors—those that influence an offender towards desistance—are not merely the absence, or the flip-side, of risk factors. In response to these assertions, NZ Corrections adopted the DRAOR as a mandatory reporting tool within probation services in 2010 (Yesberg & Polaschek, 2015). The DRAOR is generally assessed at every probation session, and reveals change in static and dynamic reoffending risk on
parole, over time. The DRAOR assesses protective factors also, which have been shown to provide incremental validity to actuarially assessed risk (Tamatea & Wilson, 2009).

Many assert that offender change is the key focus of successful reintegration; though the processes that govern how and when offender change occurs remain elusive (Lloyd & Serin, 2012; Polaschek et al., 2015; Sampson & Laub, 2016; Serin et al., 2010). Often, offenders are put through programmes in order to cajole them into choosing change, before being given the tools in order to effect real change (Polaschek & Kilgour, 2013). Indeed, the phases of the most influential model of behaviour change—the Transtheoretical Model of Change (Prochaska, DiClemente, & Norcross 1992)—begin with ‘Precontemplation’ long before ‘Action’ ever emerges. In order to change, people must believe that it is possible to change, that change is warranted, that change will lead to benefits not currently enjoyed (cost:benefit analysis), and that they themselves are ready to change (Prochaska et al., 1992). A belief in self-capacity to exert influence on oneself and one’s environments is often referred to as ‘agency’ (Ward & Syversen, 2009). Agency, along with expected negative consequences for crime, positive expected consequences for desistance, and effort put into desistance activities, are required for internal change (Lloyd & Serin, 2012). Interestingly, Sampson and Laub (2016) believe that identity change, or even a commitment to change, are not required to precede change. Experiencing positive consequences from enacting behavioural change, such as within treatment programmes, leads to change commitment and a change in identity, which then strengthens the desire to change.

The age-graded theory of crime (Sampson & Laub, 2016) posits that positive commitments on the outside, for example jobs and relationships, can act as “turning points” or ‘hooks for change’, which facilitate people who have committed crimes to desist; perhaps because they offer them something to lose (Laub & Sampson, 1993, p. 301, c.f. Rocque, Posick, & Paternoster, 2016). Under this theory, identity change and a willingness to change
precede prosocial change and desistance (Lloyd & Serin, 2012; Rocque et al., 2016; Polaschek et al., 2015). Positive identity change accords with themes of hope, agency, and redemption which are often attributed to successful desistance (Serin et al., 2010).

**Parole.** Parole in NZ refers to the six-month mandatory probationary period following release after a sentence of two or more years in prison, together with any remaining time left on a sentence if granted early release. Offenders in NZ are granted release by the Parole Board and are subject to a set of standard release conditions of parole, for example, residing at an approved address, plus any special release conditions, such as not being in possession of alcohol or illicit drugs (The Parole Act, 2002). The Parole Board monitors compliance in regards to release conditions, and has delegated power to recall parolees to serve the remainder of their sentence in prison if released early, or to refer a breach of conditions to Police if the breach occurred beyond the sentence end date.

The Parole Project (Polaschek et al., 2015, see Method section) sought to illuminate the re-entry process for NZ HRVO being released on to parole, and the factors that were likely to facilitate either their success or failure in adhering to parole conditions. Several key findings of the Parole Project studies were that treatment status (treated vs comparison men), higher levels of dynamic risk factors, and higher quality of release plans all were predictive of recidivism outcomes (Dickson et al., 2013; Polaschek et al., 2015; Robson, 2015). Further, probation officers’ behaviour towards offenders, as well as both parolee and probation officer ratings of parole experiences, were predictive of recidivism (Polaschek, 2016). Furthermore, Dynamic Risk Assessment for Offender Re-entry (DRAOR: Serin, 2007) dynamic acute risk factor scores, increased markedly before a parole offence occurred (Yesberg & Polaschek, 2015). Finally, the Release Proposal Feasibility Assessment-Revised (RPFA-R)—a measure of release readiness and obstacles to parole success—was found to predict recidivism on parole (Polaschek, Kilgour, & Wilson, 2017).
Some principles of ‘what works’ in parole intervention more generally can be gleaned from the literature. For example, several studies have found that adequate release planning improves both success in meeting basic lifestyle and well-being needs on parole, as well as decreasing recidivism rates (Polaschek et al., 2015; Scoones, Willis, & Grace, 2012; Serin & Lloyd, 2010; Willis & Grace, 2009). Secondly, the therapeutic alliance between treatment staff and client is also important in parole relationships between probation officers and parolees (Andrews, Bonta, & Wormith, 2011; Polaschek, 2016). Further, the use of CBT techniques in parole intervention reduces recidivism ($r = -.24$), while discussions of release conditions and compliance increase recidivism likelihood ($r = .25$) through the disruption of the therapeutic alliance, or the inability to form one at all (Bonta et al., 2011). Finally, Graffam, Shinkfield, Lavelle, and McPherson (2004) measured variables believed to be important in successfully navigating parole, and found parolees and probation staff had diverging opinions. This is important because, unsurprisingly, offenders’ perceptions of their prospects for success on parole affect their behaviour in prison, their ability to make quality release plans, and their approach to parole in general (Dhami, Mandel, Loewenstein, & Ayton, 2006).

Other factors that appear to influence success on parole are lower levels of dynamic risk and higher levels of protective factors (Yesberg & Polaschek, 2015); access to basic human needs including stable and sufficient housing (Polaschek, Yesberg, & Chauhan, 2015; Serin & Lloyd, 2010); prosocial networks (Naser & Visher, 2006); a shift in the crime cost:benefit analysis (Andrews & Bonta, 2006); and, even practical issues such as lower probation officer caseloads (Jalbert, Rhodes, Flygare, & Kane, 2010) and optimal length probation sessions, with adequate time spent on changing offence-supportive cognitions (Bonta et al., 2011).
There is a dearth of research on how psychopathic individuals fare on parole. In a sample of parolees who had been assessed on the original version of the PCL with median PCL scores of 27, psychopathy significantly predicted infractions of conditional release, and release type (Hart, Kropp, & Hare, 1988). For example, 24%, 49%, and 65% of low, medium, and high PCL-scorers, respectively, violated their release conditions. High-scorers were also denied early release more often than low-scorers (Serin, 1990). The authors concluded that high PCL-scorers generally fared very poorly on parole. High-scoring psychopathy scorers in another study were also disproportionately at risk of violent reoffending compared with other parolees (Harris, Rice, & Cormier, 1991). These studies however did not control for initial recidivism risk of the participants, and the second study suffered severe methodological issues (Hart, Kropp, & Hare, 1988; Skeem et al., 2011). Prior research suggests that offenders with psychopathic traits may fare worse on parole than other offenders due to the stability of psychopathic traits across settings (Edens, Skeem, Cruise, & Cauffman, 2001; Lynam & Miller, 2015). However, it is instructive to look at past ‘what works’ research with offenders on parole more generally, and also take into account the opinions of the experts themselves (parolees), in working towards better parole outcomes.

To date, aside from looking at psychopathic traits in relation to recidivism outcomes, and exploring a wealth of other negative outcomes of individuals with psychopathic traits, no research has been devoted to ascertaining how psychopathic traits might be related to reintegration outcomes for offenders. This thesis aims to assess the relevance of psychopathic traits using the triarchic conceptualisation of psychopathy for the reintegration of HRVO by determining TriPM associations with existing measures that are proxies for successful or unsuccessful reintegration, including: quality of release plans, the quality of the probation working relationship, risk of reoffending while on parole, experiences while on parole including coverage of basic needs and a measure of well-being, and recidivism, while
controlling for both static and dynamic reoffending risk (both measured pre-release). Using these measures as proxies for success or failure during reintegration, we can ascertain whether or not psychopathic traits affect these measures, and by extension reintegration. This study aims to integrate two key areas of research to ascertain what information the triarchic conceptualisation of psychopathy can add to the area of forensic psychology generally, and more specifically, what it can add in regards to reintegration research.

The design of this study is largely exploratory because so little relevant research has been conducted, especially on the components of psychopathy. But it is possible to generate some plausible hypotheses from considering the descriptors of the components and how they might manifest in offenders re-entering the community. The first research question explores the associations between the triarchic scales individually and our measures of reintegration outcomes, asking: Are the triarchic scales related with reintegration measures? Broadly, we would expect the maladaptive traits of disinhibition and meanness to be associated with poorer outcomes across all measures pre- and post-release, as these traits are hallmarked by the inability to adapt to reward/punishment contingencies, by deficient self-regulation, and, by an antagonistic, and fear-deficient temperament, respectively (Moffitt, 2002; Patrick, 2010). It is possible to create hypotheses based on distinctly different behavioural issues resulting from each of these traits. For example, disinhibition might be associated with breaches of parole based on turning up late for, or forgetting to report to, the probation officer. By contrast, meanness might lead to parole violations due to a basic underlying disrespect for the probation officer, which in turn leads to non-compliance with reporting, among other problems. However, the data are unlikely to allow us to examine these more subtle distinctions in how the traits manifest.

Therefore, we propose simply that we expect both disinhibition and meanness to be associated with a range of poorer outcomes (e.g., disinhibition might be associated with
poorer well-being due to its negative emotionality element; meanness might lead to poorer release plan quality due to a lack of meaningful engagements with social supports and social capital). In contrast, we expect boldness to be associated with a range of better outcomes on pre- and post-release measures, as this trait reflects adaptive fearlessness, optimism, and tolerance of unfamiliarity and risk (Patrick, 2010). Examples could include greater resilience to setbacks, shown in better parole experiences, and higher well-being scores. Conversely, boldness could also be associated with some apparently negative outcomes. For example, the probation officer ratings of how they treat the parolee could be poorer because a bold parolee might appear more arrogant and less likeable, or, less anxious and less vigilant to potential risk factors or obstacles which the probation officer perceives as salient.

We can make specific hypotheses about potential relationships between risk measures for further general and violent reconviction and the triarchic scales. For example, meanness has not been linked with reconviction risk but has shown a link with proactive and instrumental aggression (Patrick et al., 2009) which could lead to further violent reconviction. Gatner et al. (2016) further found that disinhibition was positively related with both physical and non-physical violence, and physical and non-physical victimisation. Furthermore, disinhibition and meanness typically evince moderate correlations with PCL-R Factor 2 scores (Patrick, 2010), which in turn have been moderately to strongly correlated with general and violent recidivism in meta-analyses (Leistico et al., 2008). Therefore, we would expect both disinhibition and meanness to be positively related with both general and violent reconviction risk in our sample of HRVO. No studies have directly tested boldness and reoffending outcomes per se, but Gatner et al. (2016) found that boldness was unrelated with aggression subtypes, violence, and victimisation of others. Weidacker et al. (2017) further found that boldness was negatively related with most types of impulsivity, apart from sensation seeking. Finally, boldness is typically only modestly related with PCL-R Factor 2,
which is strongly correlated with VRS total scores (Venables et al., 2014; Wong & Gordon, 2006). Accordingly, we would expect boldness to be unrelated with general and violent reconviction risk.

Further, owing to the debate around the relevance of boldness in measures of psychopathic traits, we thought it important to investigate the moderating effect of boldness on disinhibition and meanness separately in the prediction of a reintegration-relevant negative outcome. Our research question relating to this investigation then is: Does boldness exacerbate or attenuate the effects of disinhibition or meanness? Due to mixed previous research findings, this remains an exploratory research question rather than a hypothesis. Consistent with our first set of hypotheses, we might see that boldness attenuates the effect of disinhibition or meanness, so that negative outcomes are less likely than if boldness was not present with disinhibition or meanness. On the other hand, the triarchic conceptualisation posits boldness to be a key ingredient in psychopathy, in that it provides one of the pathways—together with disinhibition—to the clinical manifestation of psychopathic personality. Therefore, we may see boldness exacerbating the effect of the other triarchic scales.

Finally, there is limited information on how psychopathy translates into recidivism. An examination of possible mechanisms based on the available data on pre- and post-release factors could shed light on this relationship. Therefore, we were interested in exploring possible mechanisms using mediational analyses. The final research question then, asked: Are the relationships between psychopathy and recidivism mediated by other reintegration outcomes?
Chapter 2 Method

The Parole Project

The data for the current research project were acquired from the Parole Project (Polaschek et al., 2016) archival database. The Parole Project was carried out by research students from the Criminal Justice laboratory at Victoria University of Wellington under the leadership of Professor Devon Polaschek between 2010 and 2013. The project followed a sample of New Zealand (NZ) high-risk male violent offenders (HRVO) for up to 12 months in the community following their release from prison and onto parole. The project sought to illuminate for both researchers and Correctional staff what factors were likely to be implicated in offenders’ success or failure on parole; that is, factors that affected the offender’s overall capacity to adhere to standard and any special conditions while serving their parole sentence. Further, the parole project sought to disentangle the effects of treatment, to determine whether Special Treatment Unit (STU) programme completers fared better post-release than those who had not attended or completed an STU programme. The project recruited 305 NZ HRVO prior to their release on parole.

The treatment experiences of the men fell under two categories. Firstly, men who had completed one of four STU programmes specifically for violent offenders during the current prison sentence were designated “treatment completers”. Secondly, men who had completed other treatment programmes not including an STU; for example, a Medium Intensity Rehabilitation Programme (MIRP), Drug Treatment Unit programme (DTU) or individual psychological treatment sessions, and those who had received no prior treatment, were the designated “comparison” men. All those who consented to participate were interviewed at their relevant prison site up to six weeks prior to their release date. The men were subsequently followed up in the community at two and six months post-release, and for those still on parole, again after 12 months in the community. Additionally, the parolees’ probation
officers were interviewed for their professional judgments of the probation working relationship as well as their parolee’s experiences at two, six and 12 months post-release where practicable. Finally, recidivism data were extracted 12 months post-release. The following eligibility and procedure sections detail the methods of recruitment and data collection used with the participants of the Parole Project.

**Eligibility Criteria**

Eligible participants for the Parole Project met the following criteria: all were 19 years of age or older; were at a high risk of reoffending according to a static risk predictor (RoC*RoI \( \geq .65 \)); were given a custodial sentence of two years or longer for their index offence/s; and, were to be released onto parole between November 2010 and November 2013.

For inclusion in the current study, cases further required several completed pre-release measures (further detailed in measures section) including: a Triarchic Psychopathy Measure score (TriPM; Patrick, Fowles, & Krueger, 2009), a Violence Risk Scale score (VRS; Wong & Gordon, 2006), a Release Plan Quality score (RPQ; Dickson, Polaschek, & Casey, 2013), and a RoC*RoI score. Additionally, several post-release measures were required: two-month Relationship Quality Scale scores completed based on information from both parolees and probation officers (RQS; Polaschek, 2016), a two-month Parole Experiences Measure score (PEM; Gwynne, 2016), an initial Dynamic Risk Assessment for Offender Re-entry score from the parolee’s first probation check-in (DRAOR; Serin, 2007), and 12-month recidivism data.

\(^4\) See measures section.
Sample

The sample analysed in the current research comprised 285 Parole Project participants who met the above eligibility criteria. Of these participants, 139 had completed an STU programme during their current prison sentence, and 146 participants who were eligible to attend the STU programme but had not done so (see above). Despite participants in the original study not being systematically matched on demographic, criminal history, and risk variables, sample characteristics between the treatment and comparison participants were not significantly different on most variables; except for time served, and sentence given. In cases where the men differed, the treatment group were given longer sentences on average (mean difference of three months), and had served more time in prison at the point of data collection (mean difference of nine months)\(^5\). Due to the overall similarity of the two samples, combined demographic and criminal history information are presented in Table 1 below.

Consistent with the NZ general prison population, the majority of participants self-identified their primary ethnicity\(^6\) as Māori, followed by European, Pasifika, and Other. Participants were young on average both at the time of their first conviction, and at the time of their first violent conviction. Overall, as estimated by the RoC*RoI, the men’s likelihood of returning to prison for reoffending within five years was ‘high’\(^7\). The men’s Violence Risk Scale scores also indicated that on average they were at ‘high risk’ of violent reoffending in

\(^5\) ‘Lifers’ were removed for the independent \(t\)-tests for differences in time served and sentence given, as their longer sentences would inflate the true means for these variables. There were two lifers within the comparison sample, and 11 lifers within the treatment sample.

\(^6\) Categories for ethnicity were coded as follows: Māori; ‘European’, which included NZ European/Pākehā, European, European Not Further Defined, Russian, and Australian; ‘Pasifika’, which included Cook Island Māori, Cook Islander, Fijian, Niuean, Tongan, and Samoan; and ‘Other’, which included Vietnamese, and Laotian participants.

\(^7\) The eligibility process for STU programmes includes an override component, where Corrections staff can allow the entry of an offender into a programme with a RoC*RoI score below what is normally required (<.70), at their discretion. This is the reason for the single low RoC*RoI score in the dataset.
the future (Wong & Gordon, 2006). In addition to violent and general convictions, 47 participants also had sexual convictions with an average of 2.09 convictions each ($SD = 1.99$). The majority of men convicted and sentenced to prison for their current offence/s (index offence) were convicted of a primarily violent offence including: aggravated robbery; serious injury, assault, or wounding; minor assault with or without a weapon; kidnapping; threatening to kill; and manslaughter, murder, or attempted murder. Other index offence types included sexual offences, drug, property, and other antisocial offences.

Eleven men (3.86%) were serving life sentences, meaning that although released onto parole, they are subject to standard and any special conditions for the duration of their life time, and are further subject to recall to prison at any time for breaching their conditions. A further two men were serving Preventive Detention. That is, their risk of reoffending was deemed high enough by the sentencing judge that pre-emptive incarceration was necessary, until their risk decreases such that their release would not cause further undue risk to the community. These two groups of men together were deemed ‘lifers’ for the purposes of some analyses, since both were effectively on parole indefinitely. Just over half of the sample were granted early release on parole, while the remainder served their full custodial sentences before re-entry into the community. In NZ, prisoners granted early release must serve a mandatory minimum parole of six months (for any offender sentenced to two years or more of custodial sentence), plus any time remaining on their custodial sentence at their release date. Those released at their statutory release date (i.e., who served their full sentence), serve only the mandatory six months on parole.
Table 1.

Descriptive Statistics for the Demographic and Criminal History Variables of the Sample

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>RoC*RoI</td>
<td>.74</td>
<td>.11</td>
<td>.16 – .97</td>
</tr>
<tr>
<td>VRS total score</td>
<td>50.79</td>
<td>12.27</td>
<td>.00 – 72.79</td>
</tr>
<tr>
<td>Age at parole</td>
<td>32.01</td>
<td>8.52</td>
<td>19.00 – 60.00</td>
</tr>
<tr>
<td>Age at first conviction</td>
<td>16.09</td>
<td>1.91</td>
<td>11.00 – 27.00</td>
</tr>
<tr>
<td>Number of prior convictions</td>
<td>68.93</td>
<td>52.13</td>
<td>3.00 – 442.00</td>
</tr>
<tr>
<td>Number of violent convictions</td>
<td>4.92</td>
<td>4.48</td>
<td>.00 – 28.00</td>
</tr>
<tr>
<td>Custodial sentence length</td>
<td>3.87 years</td>
<td>2.63 years</td>
<td>8.53 months – 15.26 years</td>
</tr>
<tr>
<td>Parole length</td>
<td>11.57 months</td>
<td>7.90 months</td>
<td>6.00 months – 3.62 years</td>
</tr>
</tbody>
</table>

Percentage of sample N

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>N</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Māori</td>
<td>63.16</td>
<td>180</td>
</tr>
<tr>
<td>European</td>
<td>29.82</td>
<td>85</td>
</tr>
<tr>
<td>Pasifika</td>
<td>6.32</td>
<td>18</td>
</tr>
</tbody>
</table>
### Measures

The following subsections describe the various measures used in this study.

**Pre-release measures.** A number of pre-release measures were completed and compiled using file information and that taken from interviews with the men imminently before their release onto parole.
**RoC*RoI.** Risk of reConviction x Risk of reImprisonment (RoC*RoI: Bakker, O'Malley, & Riley, 1999) is a static risk prediction tool designed for use by the NZ Department of Corrections to give an indication of the likelihood of reoffending leading to reimprisonment for any offender. This actuarial risk assessment tool uses a sophisticated computer algorithm based purely on static (immovable) demographic factors such as age and gender, as well as criminal history factors such as age at first offence, and number of previous offences. The resulting equation multiplies the risk of further reconviction by the risk of a further term of reimprisonment. Probability scores are expressed as an integer between 0 and 1.00, indicating a very low, to very high, probability of reoffending resulting in imprisonment, within five years of release from prison. For example, a RoC*RoI score of 0.65 indicates a 65% likelihood of reconviction leading to a new term of imprisonment within five years (Department of Corrections, n.d.). The RoC*RoI was cross-validated using two NZ samples, each based on the criminal history data of 24,000 citizens, and showed good predictive validity (AUC = .76; Bakker et al., 1999). Nadesu (2007) found the RoC*RoI had very good predictive validity up to three years post-release in a 36-month NZ reconviction rate follow-up study. RoC*RoI scores for each offender were extracted from the Department of Corrections Integrated Offender Management System (IOMS) database at the time of their release from prison.

**Release Plan Quality scale.** Participants’ release plans were rated retrospectively using the Release Plan Quality scale (RPQ; Richards, 2016), which assesses the thoroughness and quality of an offender’s plans before his re-entry into the community. It is a researcher-rated tool that focuses on five key domains of interest relating to success on parole and assesses: stability of proposed accommodation; plans for employment or training; level of prosocial support; plans to avoid antisocial associates; and, comprehensiveness of risk management strategies to counteract risk in the proposed release environment (Richards,
Each item is rated from 1 (indicating no plan for this item) to 4 (indicating comprehensive and confirmed plans for this item) with specific examples to anchor scores for better plans for each item. The sum of all item scores gives a total release plan quality score between five and 20, with higher scores indicating better release plans. At the time of rating offender release plans were not typically recorded in a single document and so parole assessment reports, sentence plans, psychological treatment reports, and pre-release interview information (as part of the Parole Project) were used in combination to rate the offenders’ release plans. Inter-rater reliability examined in a sample of Te Whare Manaakitanga HRSTU programme starters and comparison men evinced an overall linear weighted kappa value of $\kappa = .79$ (Richards, 2016), indicating strong covariance between items. Item-total correlations ranged between $r = .53-.90$ respectively, further indicating good to excellent internal consistency. Higher release plan quality using an earlier version of the current coding protocol was found to be indicative of better success (reduced recidivism) on parole, with accuracy in predicting reimprisonment at least as well as the PCL:SV, VRS, and RoC*RoI (Dickson et al., 2013). Research using an updated (the current) RPQ further found that those with better release plans fared better on recidivism statistics following community re-entry, potentially through a positive influence on factors relating to acute dynamic risk (Richards, 2016).

**Violence Risk Scale.** The Violence Risk Scale (VRS; Wong & Gordon, 2006) is a 26-item risk assessment tool that comprises both static and dynamic (changeable) risk variables and assesses likelihood of future violent reoffending. It is staff-rated; based on a close review of file information, and a semi-structured interview with the offender (Wong & Gordon, 2006). There are six static risk items relating to criminal history variables such as age at first offence, and 20 dynamic risk items linked to risk of further violent or general offending, such as exposure to criminal associates and insight into one’s own violence. Each of the 26 items
are scored on a four-point Likert scale ranging from 0 (no relevance to offending) to 3 (strongly present), with the scores for both static and dynamic items summing to give an individual’s risk level for future violent offending ranging from ‘low’ to ‘very high’. A unique feature of the VRS is the accompanying Stage of Change (SoC) rating for all dynamic risk items that score either a 2 or 3; that is, any item that is considered to be relevant for targeting in treatment to decrease the individual’s risk of reoffending. The SoC incorporates an adaptation of Prochaska, DiClemente, and Norcross’ (1992) model of change, noting the offender’s level of engagement in change for each risk item (through five stages from precontemplation, through contemplation, preparation, action, and maintenance) both pre- and post-treatment. Intraclass correlation coefficients were found to be very strong at between .92 and .97, indicating excellent inter-rater reliability (Lewis, 2004). Cronbach’s alpha is often used as a measure of scale homogeneity, or a measure of how well scale items tap into a singular underlying construct under investigation (Tavakol & Dennick, 2011). George and Mallery (2003) provide a grading scale for Cronbach’s alpha in terms of scale reliability where > .7 is considered acceptable. Cronbach’s alpha for VRS total scores is typically very strong, for example α = .93 (Wong & Gordon, 2006), indicating excellent internal consistency. The authors of the VRS found the tool to be strongly predictive of both general and violent reoffending, with various criminal populations at both short and longer-term follow-up (Olver, Lewis, & Wong, 2013; Wong & Gordon, 2006). Further research utilising the VRS with a NZ high-risk violent offender sample found pre-treatment VRS scores to be predictive of both reconviction and reimprisonment, both with significant AUCs of .73 (Dickson et al., 2013).

**Triarchic Psychopathy Measure.** The Triarchic Psychopathy Measure (TriPM; Patrick, Fowles, & Krueger, 2009) is a 58-item self-report questionnaire that assesses an individual’s endorsement of items reflecting the three phenotypic constructs of psychopathy
within the triarchic conceptualisation of psychopathy: Disinhibition, Boldness and Meanness. These three constructs are represented by three corresponding scales within the TriPM, comprising nine, six, and nine subscales (total 24 subscales) respectively. All items are scored on a 4-point Likert scale as follows: 0 = false, 1 = somewhat false, 2 = somewhat true, 3 = true. Four subscales are reverse-coded: Empathy, Honesty, Planful Control, and Dependability. Scores on each subscale can be summed to give a total TriPM score; however, the TriPM does not purport to be diagnostic and consequently there is no recommended cut-off score. Higher overall scores then are indicative of the increased presence of psychopathic traits (Crego & Widiger, 2014a; Evans & Tully, 2016). TriPM scales correlate very highly with subscales of psychopathy that are theorised to measure the same constructs. For example, Sellbom and Phillips (2013) found that disinhibition correlated with PPI-R self-centred impulsivity \( r = .74 \) and boldness correlated with PPI-R fearless dominance \( r = .84 \) in a sample of incarcerated female offenders. Further, the TriPM evinces expected relationships with other key psychopathy measures. For example, the triarchic scales correlated with PCL-R total scores \( r = .35, .37, \) and \( .28 \) for boldness, meanness, and disinhibition respectively (Venables et al., 2014). Further, the triarchic scales have been found to correlate with PPI-R total scores \( r = .38, .64, \) and \( .48 \) for boldness, meanness, and disinhibition respectively, the LSRP inventory total scores \( r = .01, .65, \) and \( .50 \) for boldness, meanness, and disinhibition respectively), and the APSD \( r = .20, .65, \) and \( .66 \) for boldness, meanness, and disinhibition respectively), according to Sellbom and Phillips (2013). The TriPM was found to have strong internal consistency: \( \alpha = .89 \) for boldness and disinhibition, and \( \alpha = .90 \) for meanness (Sellbom & Phillips, 2013). Van Dongen, Drislane, Nijman, Soe-Agnie, and van Marle (2017) re-examined reliability with a mostly male Dutch-speaking forensic psychiatric population where the TriPM revealed strong reliability alphas \( \alpha = .86, .86 \) and \( .80 \) for boldness, meanness, and disinhibition, respectively. Average inter-item correlations ranged
between 0.9-.41, indicating acceptable internal consistency (Sellbom & Phillips, 2013).

Finally, the TriPM has strong discriminant validity; for example, with its ability to
distinguish psychopathy from the more prevalent APD (Wall, 2013), and its ability to
distinguish forensic psychiatric participants from community sample participants with a high
degree of accuracy (AUC = .75: van Dongen et al., 2017).

**Post-release measures.** Post-release data were obtained through a mixture of
interviews with offenders and with their probation officers, file information, and reconviction
information from the Department of Corrections’ national Integrated Offender Management
System (IOMS).

**Parole Experiences Measure.** The Parole Experiences Measure (PEM; Gwynne,
2016) was developed in order to assess parolees’ well-being, lifestyle, and experiences
following re-entry into the community on parole. The PEM comprises two subscales of six
items each: measuring External Circumstances and Subjective Well-Being. The external
circumstances subscale assesses parolees’ experiences across the following areas of lifestyle
and functioning: accommodation, reliance on prosocial or antisocial supports, financial
management and alcohol and drug use. The subjective well-being subscale measures the
parolee’s own perceptions of his current total well-being including aspects of mental and
physical health, negative and positive emotionality, and how the parolee felt on the day of
interviewing as well as over the month prior. Each item is rated between 1 (indicating a less
positive/more risk relevant rating for that item) to 4 (indicating a positive or more protective
rating for that item), for a total possible score of 48. Probation officers’ impressions taken
from post-release interviews were also used to corroborate the men’s opinions, to reduce any
ambiguity from the men’s responses and to substitute for them when no parolee interview
was available. Subscale scores are totalled to provide a mean external circumstances score
and a mean subjective well-being score, and the two subscale scores can be summed to
provide a mean parole experiences score. Inter-rater reliability linear weighted kappa values for all PEM items were found to be very strong to excellent: $\kappa = .82-1.00$. Cronbach’s alpha for the total PEM measure was $\alpha = .79$, with item-total correlations ranging between $r = .22-.63$, indicating, overall, acceptable internal reliability. Further, lower PEM scorers from a previous Parole Project sample were found to be reconvicted at higher rates during their first 12 months post-release, as well as experiencing a quicker return to recidivism than higher PEM scorers from the same sample (Gwynne, 2016).

**Relationship Quality Scale.** The Relationship Quality Scale (RQS; Polaschek, 2016) is an 8-item self-report scale that assesses parolees’ perceptions of various aspects of their relationship with their probation officer; essentially offenders rate their probation officer’s behaviour towards them. The RQS includes a parallel version that the probation officer completes with their impressions of their own behaviour towards the parolee. These ratings are used as a proxy for the quality of the probation officer—parolee working relationship. RQS items are rated on a Likert scale from 1 (never) to 7 (always) and measure the perceived frequency with which probation officers attend to aspects of the probation working relationship. For example, item 4 is ‘How often does your probation officer take all of your needs into account?’ RQS items explore themes of trust, fairness, probation officer approach to the probation working relationship, and parolee expectations of the probation officer role. Higher scores on all items reflect a better perceived relationship between the parolee and their probation officer. Survival analyses found that RQS ratings from both perspectives significantly predicted offending leading to reconviction, and reimprisonment (Polaschek, 2016).

**Dynamic Risk Assessment for Offender Re-entry.** The Dynamic Risk Assessment for Offender Re-entry (DRAOR; Serin, 2007) is a 19-item dynamic risk assessment tool used by probation officers to assess the recidivism risk of offenders once they are released back into
the community. Dynamic risk factors are further split into two domains labelled ‘stable’ (slow-changing, e.g. sense of entitlement) and ‘acute’ (immediate problems, e.g. substance abuse, anger/hostility) risk factors, each with six and seven items respectively. Stable and acute items are rated 0 (no problem) to 2 (definite problem). The DRAOR also includes a third protective factors domain; that is, factors which are conceptualised to decrease the likelihood of reoffending when present. For example, prosocial support can be protective if in spending increased time with people of prosocial orientation, procriminal attitudes decrease and therefore so does the likelihood of reoffending. The six protective factors are scored 0 (not protective) to 2 (definite asset), and include items such as having a prosocial (anti-criminal) identity. DRAOR scores have been found to reliably predict recidivism on parole in a NZ high-risk offender sample, as well as evidencing incremental validity over and above the RoC*RoI static risk assessment (Yesberg, 2015). This study looks at parolee’s DRAOR scores from the initial meeting with their probation officer, when first released on to parole.

**Recidivism.** Recidivism data were extracted from the Department of Corrections’ national Integrated Offender Management System (IOMS) approximately one year after the last-released offender was released from his custodial sentence, during September 2014. Four indices of recidivism were relevant to our study: 1) any new convictions including breach of parole conditions; 2) any new conviction (excluding parole breaches); 3) any new violent conviction; and, 4) any new conviction leading to reimprisonment. Recidivism indices were coded dichotomously (0 = no recidivism, 1 = recidivism).

**Procedure**

**Data Collection.** Ethics approval for this research was gained from both the Victoria University of Wellington School of Psychology Human Ethics Committee and the NZ Department of Corrections. Participants were recruited by senior doctoral candidates from the
Parole Project research team, in cooperation with NZ Parole Board staff members and the treatment staff of the HRSTU programmes involved. Finally, a proportion of men were selected from a list of all offenders soon to be released from prison who had been sentenced to two or more years of prison, and also had a high static risk of future reimprisonment according to the RoC*RoI (RoC*RoI > .65).

It was made clear to participants that taking part in the study was voluntary and no adverse consequences to their care or plans for release would ensue should they not participate, or if they chose to withdraw at any time after consenting. Participants who chose to participate gave their informed consent at each stage of the data collection. Consenting participants were first interviewed by a trained Parole Project research student, one-on-one, for approximately 1.5 to 2.5 hours in private interview rooms within the prison unit, or at the visitors’ centre of their prison. Interviews were completed as proximally as possible to the offender’s release date and no later than six weeks before release. Participants were provided with more information about the study at the beginning of the interview, and confidentiality was discussed. Participants were informed that they were able to withdraw their consent at any time, and that the Parole Project was independent from their prison management regime and the Department of Corrections. At the conclusion of the interview, participants were reminded about the follow-up interview, and consent was gained for the research team to contact them in the community two months post-release.

A member of the Parole Project research team contacted the men’s probation officers at approximately two months after the men had been released. The probation officers were requested to follow up with the men to ensure that they were still interested in participating in the research via a follow-up interview. If the men agreed to continued contact, probation officers were requested to pass on to the research team a current contact number for the parolee, or organise a time that the research team could contact the parolee at their local
Community Probation Services office. For participants who had returned to prison by two months post-release, interviews were conducted by telephone call to their relevant prison site. Confidential interviews were then held via telephone call with those who consented, lasting approximately 30 to 40 minutes in duration. During interviews, parolees were asked about their experiences across several areas of interest including: accommodation; employment or training; financial management; community, whanau, and other social supports; physical and mental health; how their leisure time was spent; time spent with criminal peers; any substance use; and, attitudes to engaging in further criminal activity. This data was collated and rated in regards to the Parole Experiences Measure. In appreciation of the men’s time and generosity, a $30 supermarket voucher or mobile phone top-up was offered to each participant at the conclusion of their interview.

Probation officers were also interviewed via telephone at two months post-release in order to gain their perceptions of the quality of the parolee’s release plans, and also regarding the parolee’s progress in the community. Interviews with probation officers were approximately 40 minutes in duration and were conducted separately from the interviews with the parolees. Research staff ensured that information gained in either interview was kept confidential from the other party. Qualitative data gained during interviews were transcribed and coded, and quantitative data regarding measures used were aggregated into Excel spreadsheets. Table 2 below outlines the measures surveyed with the men, where their data was collated from, and to which period the data related to. The following data analysis section describes the methods used for the treatment and analyses of the data in this study.
### Table 2.

**Study Measures, their Data Origins, and their Relevant Rating Period**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Origin and Rating Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triarchic Psychopathy Measure</td>
<td>Self-rated by offenders as part of their Parole Project pre-release interview process, relating to psychopathy scores at the time of release.</td>
</tr>
<tr>
<td>RoC*RoI</td>
<td>Extracted from the NZ Department of Corrections Integrated Offender Management System (IOMS), and relating to the prisoner’s risk as at release.</td>
</tr>
<tr>
<td>Violence Risk Scale</td>
<td>Scored pre-release by STU treatment staff, or by research staff based on file review and a semi-structured offender interview. Scores related to the prisoner’s violence risk as at release.</td>
</tr>
<tr>
<td>Release Plan Quality</td>
<td>Scored retrospectively by research staff using a combination of parole assessment reports, sentence plans, psychological treatment reports, and pre-release interview information.</td>
</tr>
<tr>
<td>Study Instrument</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Relationship Quality Scale (Probation Officer)</td>
<td>Responses taken from two-month post-release phone interviews with research staff, rating the previous two months on parole.</td>
</tr>
<tr>
<td>Relationship Quality Scale (Parolee)</td>
<td>Responses taken from two-month post-release phone interviews with research staff, rating the previous two months on parole.</td>
</tr>
<tr>
<td>Dynamic Risk Assessment for Offender Re-Entry</td>
<td>Scores were taken from the parolee’s initial report-in meeting with their probation officer, where the parolee was mandatorily scored on all items of the DRAOR.</td>
</tr>
<tr>
<td>Parole Experiences Measure</td>
<td>Two-month post-release interviews with parolees, as well as with probation officers, rating the previous two months on parole.</td>
</tr>
<tr>
<td>12-month Recidivism</td>
<td>Recidivism information was gained from IOMS, relating to the 12 months since parolees were released.</td>
</tr>
</tbody>
</table>
Treatment of Data

The statistical methods used in the current research are presented below. Analyses were conducted using SPSS for statistics software package version 23 (IBM Corporation, 2015) unless otherwise specified.

**Psychometric analysis of the TriPM.** Several statistical techniques were selected and employed to examine the psychometric features of the TriPM with the current sample. Firstly, means and standard deviations of participant scores on the TriPM were calculated to show the average scoring and the dispersion of the sample's scores. Next, Pearson’s correlations were analysed in order to examine the strength and direction of the relationships between the TriPM scales and the other predictor variables in our study. Cohen (1988) provides interpretation of Pearson’s $r$ correlations as follows: $r < .29$ indicates a small or weak correlation, $0.30 < r < .50$ is indicative of a moderate correlation, and $r > .50$ is considered to be a large correlation.

Further, Cronbach’s reliability alphas for each scale were computed. Scale homogeneity is one measure used to assess internal consistency or item reliability. Finally, average item-total correlations are a further measure of item reliability, and test whether individual scale items correlate well with the average of other items for that scale (Pallant, 2013). Walters (2017a) recommends the use of item-total correlations when testing the reliability of scales with fewer than 10 items, as applies here. Item-total correlations below $r = .20$ are stated to lack sufficient reliability and it is advised that they should be removed both from the scale under investigation and from further statistical analyses (Field, 2005).

**Interaction effects.** In order to test whether boldness exacerbated or ameliorated the effects of meanness or disinhibition, hierarchical stepwise regression was carried out using the PROCESS macro for SPSS (Hayes, 2012-2018). Hierarchical stepwise regression allows
for the investigation of the interactive effects of two or more continuous variables on each other, together with a third moderating variable, while controlling for the main effects of each of the variables. In this way, the effects of variables on each other at different levels of a moderator can be investigated. An F-test provides significance testing for the interaction terms. Simple slopes and the unstandardised regression coefficients provide tests of the direction and strength of any interaction effects.

**Linear multiple regression analyses.** To examine the unique predictive validity of the triarchic scales and other study variables on non-dichotomous reintegration outcomes, multiple linear regression was utilised. All variables were entered simultaneously into each of the regression analyses. Linear multiple regression allows the investigation of unique variance in the prediction of relevant outcomes between continuous variables. Multiple regression results express the predicted change in the dependent variable/s based on a one unit change in the predictor variable/s; with associated increases in the outcome variable evincing positive regression coefficients, and decreases in the outcome variable evincing negative regression coefficients. The constant (indicating the intercept), unstandardised regression coefficients (β), standard errors of the coefficients, t-test values and the p-values are used to interpret the strength, direction and significance of the regression analyses results.

**Mediational analyses.** In order to test whether study variables including the triarchic scales influence recidivism through mediating variables, logistic mediational analyses were carried out. Mediational analyses test whether a third, mediating variable, conveys information about the independent variable, to the dependent variable (MacKinnon, Fairchild, & Fritz, 2007). If the mediating variable does transmit information in this way then the direct relationship between the independent and dependent variables should reduce once the mediator variable is included in the equation. This would indicate a successful (partial) mediation. If the direct relationship reduces to zero once the mediating variable is included in
the relationship, then full mediation is said to have taken place. Full mediation, however, almost never occurs in forensic applications due to the many confounding and unknown mediating (or moderating) variables which are unable to be easily measured or controlled for (Walters, 2017a). The use of dichotomous outcome variables in mediational analyses such as we have in this study (0 = no, 1 = yes for recidivism) dictates that a choice be made between the use of probit or logistic regression (Muthén & Muthén, 2016).

For binary outcomes it is more appropriate to switch the default probit mediation to a logistic mediation, using the maximum likelihood estimator in Mplus with logit as the link function. Logistic mediation\(^8\) is preferred over the traditional causal steps method (Baron & Kenny, 1986) as often the power required to detect effects using this latter method is prohibitive. Many times, no effect, or an incorrect estimate of the effect, will be produced due to the reliance of the causal steps approach on mediated effects being normally distributed (MacKinnon et al., 2007) which is not common in forensic applications (Walters, 2017a). Further, the use of Monte Carlo integration and resampling methods such as bootstrapping produce more accurate results with non-normal distributions, and require that less statistical assumptions be met (MacKinnon et al., 2007). In terms of interpreting effect sizes for the amount of variance conveyed from one variable to another (the size of the mediated effect), Cohen states that effect sizes of .01, .09, and .25 can be interpreted as small, medium, and large effect sizes (Preacher & Kelley, 2011).

\(^8\) A newer approach to estimating mediation effects called the ‘counterfactual approach’ has been developed that is hypothesised to reveal more accurate estimates of effects than both logistic mediation and the causal steps method (Muthén & Asparouhov, 2014). In this study we performed the counterfactual analyses also, and the difference in results compared with logistic mediation was minimal. A decision was made to report the more well-known logistic mediation format for ease of interpretation and comprehension for readers.
Chapter 3 Results

The results section is presented as follows. Firstly, the results for the psychometric analysis of the Triarchic Psychopathy Measure (TriPM) are presented. Second, the results for the statistical analyses utilised to investigate the research questions are presented. Numerical information is presented rounded to two decimal places unless rounding would result in a zero value.

Psychometric Analysis of the TriPM

Central tendency and dispersion. Recall that higher scale scoring indicates a stronger presence of triarchic psychopathy traits. For the boldness scale, scoring is moderate to high, with fairly low variability. For the meanness scale, scoring is low to moderate, with fairly low variability. The disinhibition scale evinces moderate to high scoring, with mostly low variability. Overall, the mean scale scores were 53.05 for boldness (SD = 7.40), 37.70 for meanness (SD = 10.43), and 58.32 for disinhibition (SD = 8.80), out of possible scoring of 76, 76, and 80, respectively.

Internal reliability. Cronbach’s alpha was calculated for the triarchic scales overall and individually. The reliability alphas of the overall sample for the boldness and disinhibition scales were \( \alpha = .70 \) and \( \alpha = .73 \), respectively; indicating that reliability was at an acceptable limit for both scales. Cronbach’s alpha for the meanness scale was \( \alpha = .87 \), indicating strong reliability for this scale. Cronbach’s alpha for the overall TriPM measure was \( \alpha = .82 \), again indicating strong reliability for the overall measure. Five items from the TriPM had item-total correlations below the recommended cut-off parameter of .20 (Field, 9 As calculated by the coefficient of variability (CV). All triarchic scale CVs were significantly less than 1.
Tavakol and Dennick (2011) state that scales with heterogeneous items that do not measure a unidimensional construct will inevitably encounter lower reliability alphas; due to alpha’s assumption of equal variances between items. Closer inspection of these five items revealed that their removal would not significantly improve the reliability of the scales. Further, the items were sufficiently important to the scales that the decision was made to leave the items in for subsequent analyses, and for ease of comparison with prior and future research. The remaining item-total correlations were mostly in the moderate range with five slightly larger correlations. Taken together, the analyses of internal consistency used here indicated that the TriPM demonstrated strong internal reliability.

**Bivariate correlations of triarchic scales.** Pearson’s r correlations were calculated between each pairing of the triarchic scales and are presented in Table 3 below. Correlations were of conceptually and empirically expected magnitude and direction (Patrick et al., 2009). That is, consistent with the developer’s research and that of others, boldness and meanness shared some variance and so elicited a small but notable significant positive relationship in our sample; meanness and disinhibition overlap the most and so elicited a moderate positive relationship; and, there was a slight negative relationship between boldness and disinhibition, which did not reach statistical significance for this sample.
Table 3.

Intercorrelations of the Triarchic Scales

<table>
<thead>
<tr>
<th></th>
<th>Boldness</th>
<th>Meanness</th>
<th>Disinhibition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boldness</td>
<td>1.00</td>
<td>.18**</td>
<td>-.10</td>
</tr>
<tr>
<td>Meanness</td>
<td>-</td>
<td>1.00</td>
<td>.36**</td>
</tr>
<tr>
<td>Disinhibition</td>
<td>-</td>
<td>-</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Note: ** $p < .01$. $N = 285$

**Relationships between the Triarchic Scales and Reintegration Measures**

Several statistical analyses were performed in order to investigate the following research questions:

1. Are the triarchic psychopathy scales of boldness, meanness and disinhibition associated with measures of reintegration as follows:
   a) Written plans for taking care of all basic needs after release as measured by Release Plan Quality;
   b) Risk of further violent offending as measured by the Violence Risk Scale;
   c) Risk of any further reoffending as measured by the RoC*RoI;
   d) The quality of offenders’ experiences across several important domains of basic needs while on parole – including physical and mental well-being – as measured by the Parole Experiences Measure;
   e) Risk of reoffending on parole as measured by the parolee’s initial probation meeting scores on the DRAOR;
   f) Probation officer ratings of their behaviour towards parolees, and parolees’ ratings of
probation officer behaviour, as measured by the Relationship Quality Scale; and

g) Recidivism?

2. Does boldness attenuate or exacerbate meanness and disinhibition when present?

3. Are the relationships between the triarchic scales and recidivism mediated by other reintegration variables?

**Research question 1: Are the triarchic psychopathy scales related with reintegration measures?** This section examines the relationships between the triarchic scales and several measures of reintegration, including recidivism, that were collected during the Parole Project for our sample of HRVO.

**Bivariate correlations of the triarchic scales and reintegration variables.**

Correlations between the triarchic scales and the other pre-release and post-release variables individually were analysed and are presented in Table 4 below. All significant correlations found for these analyses were weak to small. Our original hypotheses regarding boldness were not supported. For example, boldness was not positively related with the positive outcome measures (Release Plan Quality, Relationship Quality Scale, and Parole Experiences Measure scores). Boldness was instead unrelated to total Parole Experiences Measure scores, and weakly but negatively related with Release Plan Quality, and Relationship Quality Scale scores. Further, boldness was positively but non-significantly related with measures of risk (RoC*RoI, Violence Risk Scale, and DRAOR total scores), and negatively but non-significantly related with DRAOR protective factors (which are hypothesised to reduce the likelihood of reoffending, and which are therefore positive assets). Meanness however, did evince significant expected relationships with the Violence Risk Scale, Release Plan Quality and Relationship Quality Scores (probation officer version), as well as with DRAOR total and protective scores, and expected non-significant relationships with other study variables. Disinhibition showed expected significant negative relationships with Parole Experiences
Measure total and internal well-being scores, and DRAOR protective factor scores, and non-significant relationships in the expected direction with most other reintegration variables. However, disinhibition revealed an unexpected non-significant negative relationship with RoC*RoI scores. Overall, there was some support for our hypotheses in relation to meanness and disinhibition.

Table 4.
Correlations Between the Triarchic Scales and Pre- and Post-Release Measures

<table>
<thead>
<tr>
<th>Pre-Release Measure</th>
<th>Boldness</th>
<th>Meanness</th>
<th>Disinhibition</th>
</tr>
</thead>
<tbody>
<tr>
<td>RoC*RoI</td>
<td>.03</td>
<td>.00</td>
<td>-.02</td>
</tr>
<tr>
<td>Violence Risk Scale Total</td>
<td>.09</td>
<td>.16**</td>
<td>.03</td>
</tr>
<tr>
<td>Release Plan Quality</td>
<td>-.13*</td>
<td>-.24**</td>
<td>-.08</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Post-Release Measure</th>
<th>Boldness</th>
<th>Meanness</th>
<th>Disinhibition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship Quality Scale PO Rating</td>
<td>-.14*</td>
<td>-.23**</td>
<td>-.04</td>
</tr>
<tr>
<td>Relationship Quality Scale Parolee Rating</td>
<td>-.13</td>
<td>-.12</td>
<td>.04</td>
</tr>
<tr>
<td>Parole Experiences Measure Total</td>
<td>.00</td>
<td>-.13</td>
<td>-.16*</td>
</tr>
</tbody>
</table>
Relationships between the TriPM and recidivism. Next, we investigated whether scores on the triarchic scales were individually associated with recidivism outcomes.

Recidivism was operationalised as four indices: 1) new convictions including those arising from breaches of parole conditions, 2) new convictions excluding breaches of parole, 3) violent convictions, and 4) any conviction that led to a new term of imprisonment, all measured within the first 12 months following release.

Bivariate correlations of the triarchic scales and recidivism. Pearson’s $r$ correlations are presented for the relationships between scores on each of the triarchic scales and the four recidivism indices below in Table 5. Disinhibition and new reconvictions (both including and excluding those for breaches) were weakly and significantly related. All other relationships

<table>
<thead>
<tr>
<th>TRIARCHIC PSYCHOPATHY AND REINTEGRATION</th>
<th>55</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEM Internal Well-being</td>
<td>-.04</td>
</tr>
<tr>
<td>PEM External Circumstances</td>
<td>.04</td>
</tr>
<tr>
<td>DRAOR Total</td>
<td>.08</td>
</tr>
<tr>
<td>DRAOR Stable</td>
<td>.11</td>
</tr>
<tr>
<td>DRAOR Acute – Internal</td>
<td>.08</td>
</tr>
<tr>
<td>DRAOR Acute – External</td>
<td>-.03</td>
</tr>
<tr>
<td>DRAOR Protective</td>
<td>-.05</td>
</tr>
</tbody>
</table>

Notes: Sample sizes: $N = 285$ for RoC*RoI; $N = 282$ for RPQ; $N = 270$ for VRS; $N = 235$ for RQS - PO Rating; $N = 192$ for RQS - Parolee Rating; $N = 178$ for PEM; and, $N = 281$ for DRAOR. * $p < .05$. ** $p < .01$. 
were non-significant. This indicates that of the triarchic scales, only disinhibition is associated with an increase in any of the recidivism indices, and then only weakly with reconvictions (both including and excluding breaches). Our hypotheses in relation to meanness, disinhibition and recidivism were overall not supported as only two weak correlations between disinhibition and recidivism were found.

Table 5.

Correlations between Triarchic Scale Scores and 1-Year Recidivism Measures

<table>
<thead>
<tr>
<th></th>
<th>Reconviction (Inc. Breach)</th>
<th>Reconviction (Excl. Breach)</th>
<th>Violent Conviction</th>
<th>Reimprisonment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boldness</td>
<td>.07</td>
<td>.01</td>
<td>.02</td>
<td>.01</td>
</tr>
<tr>
<td>Meanness</td>
<td>.06</td>
<td>.03</td>
<td>.03</td>
<td>.00</td>
</tr>
<tr>
<td>Disinhibition</td>
<td>.13*</td>
<td>.13*</td>
<td>.08</td>
<td>.09</td>
</tr>
</tbody>
</table>

Note: *p < .05 level, N = 278.

**Predictive validity of the triarchic scales in relation to reintegration outcomes.** Finally, in order to test the unique predictive validity of the triarchic scales in relation to the reintegration variables while controlling for the shared variance within the triarchic measure, linear regression analyses were carried out with the psychopathy scales and all pre-release and post-release variables excluding recidivism.
Multiple linear regression analyses. The multiple regression results are presented below in Table 6. The analyses revealed that after controlling for the shared variance between the triarchic psychopathy scales, only meanness remained uniquely predictive of Violence Risk Scale, Release Plan Quality, Relationship Quality Scale (for the probation officer, but not the parolee version) and Dynamic Risk Assessment for Offender Re-entry scores (models 1-7 below). Boldness and disinhibition were no longer predictive of any reintegration variables once shared variance between the triarchic scales was removed. This indicates that the triarchic scales are indeed differentially associated with reintegration variables of interest, with meanness driving the majority of the unique variance accounted for within the regression analyses.

Table 6.
Regression Analyses for Triarchic Psychopathy Scales and Pre- and Post-Release Study Variables

<table>
<thead>
<tr>
<th>Outcome</th>
<th>IVs</th>
<th>β</th>
<th>SE</th>
<th>p</th>
<th>ΔR²</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1 RoC*RoI</td>
<td>Boldness</td>
<td>.0004</td>
<td>.001</td>
<td>.69</td>
<td></td>
<td>285</td>
</tr>
<tr>
<td>Model 1 RoC*RoI</td>
<td>Meanness</td>
<td>.0001</td>
<td>.001</td>
<td>.93</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model 1 RoC*RoI</td>
<td>Disinhibition</td>
<td>-.0002</td>
<td>.001</td>
<td>.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model 2 VRS</td>
<td>Boldness</td>
<td>.10</td>
<td>.10</td>
<td>.33</td>
<td></td>
<td>278</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model</th>
<th>Scale</th>
<th>Boldness</th>
<th>Meanness</th>
<th>Disinhibition</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>RPQ</td>
<td>-.04</td>
<td>.02</td>
<td>.12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-0.06</td>
<td>.02</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-.01</td>
<td>.02</td>
<td>.80</td>
</tr>
<tr>
<td>4</td>
<td>RQS – PO</td>
<td>-.01</td>
<td>.01</td>
<td>.13</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-0.02</td>
<td>.01</td>
<td>.002</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.003</td>
<td>.01</td>
<td>.58</td>
</tr>
<tr>
<td>5</td>
<td>RQS – PL</td>
<td>-.02</td>
<td>.01</td>
<td>.18</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-.02</td>
<td>.01</td>
<td>.08</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.01</td>
<td>.01</td>
<td>.34</td>
</tr>
<tr>
<td>6</td>
<td>DRAOR</td>
<td>.04</td>
<td>.04</td>
<td>.36</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.08</td>
<td>.03</td>
<td>.01</td>
</tr>
</tbody>
</table>
Disinhibition  .03  .04  .43

Model 7  PEM  .03  168

Boldness  -.001  .01  .87

Meanness  -.004  .01  .43

Disinhibition  -.01  .01  .14

Note: VRS = Violence Risk Scale; RPQ = Release Plan Quality; RQS-PO = Relationship Quality Scale (Probation Officer version); RQS-PL = Relationship Quality Scale (Parolee version); DRAOR = Dynamic Risk Assessment for Offender Re-entry initial rating scores; and, PEM = Parole Experiences Measure. Significant regression coefficients are shown in bold.

**Research question 2: Does boldness attenuate or exacerbate the effects of meanness or disinhibition?** In order to test whether boldness exacerbated or ameliorated the effects of meanness or disinhibition, hierarchical stepwise regression was utilised. In line with our initial hypotheses where boldness is hypothesised to be related to positive outcomes, we expected that boldness would attenuate the presence of meanness when co-occurring in regards to a measure of typically negative outcomes, such as reoffending risk on parole (DRAOR scores). DRAOR was chosen as the dependent variable in this analysis as it is a particularly relevant measure to reintegration, due to higher risk of reoffending on parole leading to worse outcomes and being a marker of recidivism. If boldness attenuated the relationship between meanness and DRAOR scores, a decrease in DRAOR scores would be evident; however, if boldness was found to exacerbate meanness’ relationship to DRAOR scores, an increase in DRAOR scores would be revealed.

**Interaction effects.** Meanness and initial DRAOR scores were entered in the first step, and the interaction term meanness x boldness in the second step. The results indicated
that the relationship between meanness and initial DRAOR scores was moderated by boldness ($\Delta R^2 = .01$. $\Delta F(1, 277) = 4.08, p = .04$) which accounted for 1% of additional variance of increase in initial DRAOR scores. Conversely, the interaction between disinhibition, boldness, and initial DRAOR scores was non-significant ($\Delta R^2 = .001$. $\Delta F(1, 277) = .15, p = .70$).

To interpret the moderating effect of boldness on the relationship between meanness and DRAOR scores, we plotted the relationship between meanness, initial DRAOR scores and boldness (Figure 2), while controlling for the main effects of the predictor variables; meanness and initial DRAOR scores. Analyses of the simple slopes revealed that the interaction was significant only at moderate (slope = .07, $t = 2.47, p = .01$) and high (slope = .13, $t = 3.76, p = .0002$) levels of boldness, and not at lower (slope = .02, $t = .44, p = .66$) levels of boldness. This suggests that boldness exacerbates meanness’ effect on risk of reoffending on parole when meanness is already present at moderate or high levels, but not at levels considered to be low.

Figure 2. Graph of interaction between Meanness and Dynamic Risk Assessment for Offender Re-entry (DRAOR) scores, moderated by Boldness.

Note: The dashed line = low boldness (n.s.); the grey line = moderate boldness; and, the black line represents high boldness.
Research question 3: Are the relationships between the triarchic scales and recidivism mediated by other reintegration variables? Although we found only two significant correlations from 12 comparisons of the triarchic scales with the recidivism variables, we conducted several exploratory mediational analyses to investigate the possibility of indirect relationships existing. Jose (2013) states that significant mediations can still be discovered, even when there is no direct relationship between the independent variable and the dependent variable. Specifically, we examined whether meanness, boldness or disinhibition individually exerted effects on recidivism through parolee experiences; whether meanness influenced recidivism through an effect on violence risk scores; whether boldness exerted an effect on recidivism through the mediator of probation officer relationship scores; and, whether or not disinhibition had an effect on recidivism through a measure of reoffending risk while on parole. In each case we expected boldness to lead to better outcomes, and meanness and disinhibition to lead to adverse outcomes for the parolees.

Mediation analyses. The base model for the mediations is presented in Figure 3, below. For each set of mediations, the dependent variables of recidivism (DV1 = reconvictions including breaches, DV2 = reconvictions excluding breaches, DV3 = violent reconvictions, and DV4 = reimprisonment) were included and regressed simultaneously on to both a single mediating variable (MV: Violence Risk Scale scores, Parole Experiences Measure scores, initial DRAOR scores, or Relationship Quality Scale - probation officer ratings) and a single independent variable (IV: boldness, meanness, or disinhibition), which changed with each consecutive mediation. In this manner, the unique indirect effects were under focus while all other relationships within the model were controlled for.

Indirect, direct, and total effects were computed for the three-variable mediations using the structural equation modeling (SEM) program Mplus 8 (Muthén & Muthén, 1998-2017), with maximum likelihood estimation and Monte Carlo integration. The significance of
the estimates of the indirect effects were evaluated using bias-corrected bootstrapped 95% confidence intervals (b = 1,000). The full results for the mediational analyses are presented in Table 3, and Figures 1 to 6, of the appendices. There were significant indirect effects of disinhibition on reconvictions including breaches, violent reconvictions, and reimprisonment, through Parole Experience Measure scores, ($b = .03, p = .05, \text{CI [.01, .07]; } b = .02, p = .05, \text{CI [.003, .04]; and, } b = .02, p = .04, \text{CI [.003,.05], respectively}$). The indirect effect between disinhibition and reconvictions excluding parole breaches was on the cusp of significance ($b = .03, p = .058, \text{CI [.003, .06]}$). No other mediations were significant or came close to significance.

In this sample, higher disinhibition scores tend to be associated with poorer parole experience measure scores, which tend to be associated with increased recidivism. Parole experience measure scores accounted for approximately 77% of the total effect between disinhibition and reconvictions including parole breaches; 67% of the total effect between disinhibition and violent reconvictions, and 82% of the total effect between disinhibition and new terms of reimprisonment. These significant pathways lend support to the conclusion that although disinhibition lacks direct relationships with recidivism indices, it does appear to exert an indirect influence on recidivism measures through an influence on poorer parole experiences, which in turn are predictive of poorer recidivism outcomes. Although the size of the effects are small (Preacher & Kelley, 2011), this is not uncommon in mediational research where the inclusion of control and other variables considerably complicates the model and decreases the total possible effect due to the partialling out of important variance (Walters, 2017a & b).
Figure 3. Base model for testing mediational hypotheses. IV and MV changed over consecutive mediations according to the research question, i.e., while the dependent variables DV1-4 (DV1 = reconvictions including breaches: ‘Recon inc’, DV2 = reconvictions excluding breaches: ‘Recon excl’, DV3 = violent reconvictions: ‘Violent’, and DV4 = reimprisonment: ‘Reimp’) remained the same, the IV (either boldness, meanness, or disinhibition); and the MV (either Violence Risk Scale scores, Parole Experiences Measure scores, initial DRAOR scores, or Relationship Quality Scale - probation officer version scores) were interchanged depending on the analysis under investigation. Full mediation results are presented in Table 3 and Figures 1 to 6 of the appendices.

Taken together, these analyses show that the triarchic scales evince differential relationships with reintegration variables in our sample of HRVO. Further, the majority of the significant outcomes in this sample – whether positive or negative offender outcomes – were driven by meanness, rather than boldness or disinhibition. Finally, while disinhibition showed no direct relationships with recidivism measures in the mediational analyses, disinhibition did influence how offenders scored on a measure of parolees’ experiences of parole, for which lower scores have been shown to be predictive of recidivism.
Chapter 4 Discussion

Our study was the first to investigate relationships between psychopathy at the construct level, operationalised via the triarchic conceptualisation of psychopathy, and a range of parole and community reintegration outcomes. In order to ascertain the relevance of the triarchic psychopathy traits for the reintegration of high-risk violent offenders, we carried out correlational, regression, and mediation analyses with a sample of New Zealand high-risk violent offenders (HRVO) who had completed a number of measures of reintegration-relevant outcomes both prior to, and shortly after, community re-entry. In the following subsections is presented a recap of the findings, together with a brief discussion of the implications and potential applications of these findings. Limitations and future directions are then outlined.

Comparing Triarchic Scores with Previous Research

It is difficult to compare TriPM scale scores across studies due to variations in item scoring. Different researchers use a variety of Likert scale scoring, such as: 0-3 (where 3=true, total possible scale scores 57, 57, and 60, higher scores = elevated psychopathic traits), 1-4, (where 4=true, possible scale scores 76, 76, and 80, higher scores = elevated psychopathic traits) or 1-4 (where 1=true, higher scores = lower on psychopathic traits). However, our chosen item scoring, (i.e. 1-4, where 4=true, possible scale scores 76, 76, and 80, and higher scores = elevated psychopathic traits) was the same as that of Stanley et al. (2013), and our sample’s triarchic scale scores were very similar. Stanley and colleagues investigated the construct validity of the TriPM in a sample of 141 inmates (94% male, 7% incarcerated for violent offences). Their sample evinced scale means and standard deviations of 50.7(8.5), 41.5(11), and 53.7(11.3) for boldness, meanness, and disinhibition, respectively. Regarding the intercorrelations between the triarchic scales, our results were consistent with several studies that have used the TriPM with community, university student, and forensic
populations (Blagov et al., 2016; Craig, Gray, & Snowden, 2013; Kelley et al., 2017; Ruchensky & Donnellan, 2017; Snowden, Smith, & Gray, 2017; van Dongen et al., 2017; Venables et al., 2014; Weidacker et al., 2017). Boldness and disinhibition typically produce weak and non-significant, negative correlations, boldness and meanness usually produce small to moderate significant correlations, and disinhibition and meanness being most related, typically produce moderate to large significant correlations. Intercorrelations within our sample reproduced these same patterns.

**Application of Findings**

We tested whether the three triarchic constructs of boldness, meanness, and disinhibition were differentially related with pre-release measures (Violence Risk Scale [VRS], Release Plan Quality [RPQ], RoC*RoI), and post-release measures (Relationship Quality Scale [RQS], Parole Experiences Measure [PEM], Dynamic Risk Assessment for Offender Re-entry [DRAOR], and recidivism) of reintegration outcomes.

**Triarchic scale relationships with risk measures.** Contrary to our hypotheses, meanness and disinhibition were both unrelated with RoC*RoI scores. Given previous research linking particularly PCL-R psychopathy with reconviction risk, and particularly Factor 2 (Antisocial/Lifestyle) scores which reference externalising behaviour (Leistico et al., 2008), our finding in regards to disinhibition’s, and to a lesser extent meanness’, lack of relationships with RoC*RoI scores is interesting because we expected to see significant positive relationships between these variables. However, as expected, meanness was positively correlated (weakly) with VRS scores. It is plausible that meanness would be related with VRS scores, as conceptually, a disdain for interpersonal relationships and a lack of empathy might lead to increased violence in an individual already prone to externalising their anger, such as an HRVO. It is interesting however that this relationship did not cut both ways; disinhibition showed no relationship with VRS scores on its own. In our sample, where
inmates have presumably lowered their instigation of violence to enable entry into treatment programmes, perhaps the meanness element is the defining element which allows one to enact interpersonal violence over and above traits of disinhibition alone, explaining the inconsistency of our results with prior studies.

Boldness, however, was expected to be unrelated with RoC*RoI and VRS scores and this is what we found. Boldness references adaptive traits such as resilience to stressors, adaptive fearlessness, self-assurance, and optimism. These traits on their own are unlikely to cause people to reoffend, generally or violently. Our results were consistent with prior research in this regard. In sum, it appears that triarchic psychopathy is not linked with an increased risk of reconviction within five years, even in HRVO with psychopathic traits. Further, it seems that only triarchic meanness is related with a risk of general reoffending and further violent reoffending, but only when measured using dynamic risk assessment tools such as the VRS, and not when measured using static risk assessment tools such as the RoC*RoI.

**Triarchic scale relationships with reintegration outcomes.**

*Boldness.* Our results indicated that the triarchic scale of boldness was not positively correlated with the more positive outcome measures (probation relationship quality, parole experiences, and release plan quality) as hypothesised. Instead, boldness was unrelated with parole experiences, parolees’ ratings of the probation relationship, and the DRAOR. Further, boldness was weakly but negatively related with release plan quality, and the probation officer’s ratings of their behaviour toward the parolee. Returning to our conceptual arguments for boldness, recall that we proposed one expression of boldness could be reflected in poorer probation relationship scores, where the probation officer might rate their behaviour towards bold parolees as less positive. This could be due to bold parolees appearing as slick, glib, and potentially arrogant; behaviour which is likely to be interpreted by probation officers as
coming from individuals who do not see a need for intervention. Our results were consistent with this scenario. Secondly, bold parolees might create good quality release plans because they are self-assured and possess social prowess. This would enable them to initially create the relationships with agencies, probation staff, and community members needed to facilitate core needs such as accommodation and work. However, our results indicated that boldness is potentially harmful in creating good quality release plans. In this case, perhaps bold parolees’ tendency to socially dominate situations, coupled with arrogance, actually serves to turn people away from helping them rather than granting them long-term assistance. Looking to the recent literature, the study of the correlates of boldness has produced mixed results. Some studies have found relationships between boldness and measures of adaptive functioning only (Gatner et al., 2016; Miller et al., 2016), while others have found that boldness relates significantly with measures of both adaptive and maladaptive functioning (Drislane et al., 2014; Lilienfeld et al., 2016; Neo, Sellbom, Smith, & Lilienfeld, 2016). Our results appear to be consistent with the latter. Finally, some insignificant relationships for boldness (DRAOR stable dynamic risk factors, and parolee ratings of probation officer behaviour) produced small relationships in unexpected directions which is intriguing; overall it appears that boldness in this sample is associated with more negative outcomes than positive.

**Meanness.** Also contrary to our hypothesised relationships, meanness was unrelated to parolees’ ratings of probation officer behaviour, and parole experiences. However, meanness produced weak significant negative relationships with release plan quality and probation officers’ ratings of their behaviour towards parolees, and a weak significant positive relationship with the DRAOR. Several interesting observations emerge from these findings. Firstly, if you are high on meanness traits, this may affect the way your probation officer treats you (expected outcome), but it doesn’t necessarily change how you view your probation officer’s behaviour towards you (unexpected outcome). Perhaps this is pre-
emptively protective following a history of rejection and coercive exchanges with everyone in the individual’s ecological system (see Lykken, 1957; Moffitt, 1993). Secondly, meanness was unrelated with parole experiences. Conceptually, the antagonistic and danger-seeking components of meanness should make meanness incompatible with good parole experiences due to a lack of interpersonal relationships and potential mishaps leading to poorer well-being overall. But this would lead to a negative relationship with parole experiences; in our study we did not see this. It is possible that an insensitivity to others’ needs and emotions is protective, yet the antagonistic and sadistic features of meanness are inflammatory, and so they cancel each other out on measures such as the parole experiences measure. Thirdly, meanness evinced expected relationships with DRAOR scores, in that meanness was positively related with dynamic acute internal risk factors (factors related to the person themselves and their emotionality), and negatively related with protective factors. Finally, we also made an argument for meanness being associated with poorer quality release plans due to reduced social capital, and this appeared to eventuate in our findings. These results support future research decomposing psychopathy into its constituent parts and analysing external relationships with each part, rather than a reliance on relationships with total scores. This is because, as our results showed, the triarchic scales produce opposing relationships with outcome variables that would otherwise be masked from discovery.

**Disinhibition.** Disinhibition was unrelated with most reintegration outcomes, except for weak significant negative relationships with parole experiences, and DRAOR protective factors only. Disinhibition is hallmarked by a tendency to externalise negative feelings, frustration, and anger through irrational, aggressive, and irresponsible actions, and by a lack of self-control and patience. These traits, along with abusing others’ trust, and acting fraudulently, could lose individuals valuable support while on parole; support that would help them succeed. Together with anxiety and negative emotionality, this concoction could result
in poorer parole experiences, and a lack of evident protective factors, as evidenced in our findings. Disinhibition’s lack of relationship with release plan quality hints at the idea that disinhibited people may be capable of making good quality release plans, but unfortunately that did not translate into better parole experiences. Further, disinhibition was unrelated with probation relationship scores, meaning that disinhibition had no particular effect on how the probation officer behaved towards their parolee, or how the parolee rated the probation officer’s behaviour toward them. Perhaps the lack of relationship here reflects an indifference from both disinhibited parolees and probation officers towards each other, or perhaps probation officers try harder to engage disinhibited parolees and understand that they need more probation attention to motivate. The lack of relationship with DRAOR scores is perhaps the most interesting, as presumably externalising, uncontrolled behaviour heads a person directly for high scores on stable dynamic risk factors such as impulse control and problem-solving, as well as acute dynamic risk factors such as employment, and negative mood, among others. It is unclear why this pattern did not eventuate within our sample, yet the negative relationship with protective factors was significant. This finding, however, supports the research of Serin and colleagues in that protective factors are not just the opposite of risk factors (if they were, we would expect to see relationships of similar magnitude in the opposite direction for risk factors and protective factors); there is something more to the concept (Lloyd & Serin, 2012; Serin, 2007, 2015; Serin, Lloyd, & Hanby, 2010).

**Triarchic scales and recidivism.** Turning to the relationships between the triarchic scales and recidivism, only disinhibition was weakly related with reconvictions (both including, and excluding parole breaches). Meanness and boldness showed no relationship with any recidivism indices. These results are consistent with disinhibited people’s tendency towards externalising behaviour, as well as negative emotionality, and impulsivity (Lilienfeld et al., 2016; Patrick et al., 2009; Sellbom & Phillips, 2013). These traits, which are replete
with deficient self-regulation—both emotional and behavioural—are likely to influence the positive relationship between disinhibition, parole infractions, and other reconvictions excluding parole breaches, because a lack of self-regulation leads to an inability to be able to maintain stability and adhere to set parameters (parole conditions). Our results are further consistent with studies investigating the PCL-R factors and facets and which found that the callous/coldheartedness and interpersonal facets are rarely predictive of negative outcomes by themselves (Daly, 2017; Hare, 2003; Olver & Wong, 2011; Walters, 2012, 2017b).

The relationships between violent reconvictions and reimprisonment and the three triarchic scales were weak and positive, but did not reach significance. However, only a small proportion of our overall sample were reconvicted for violent offences or reimprisoned within the relatively short follow-up period (reconviction probability tools tend to have longer follow-ups, for example, the RoC*RoI estimates reconviction and reimprisonment rates within five years of release). With a higher base rate of recidivism for these two outcomes the relationships between disinhibition, violent reconvictions and reimprisonment may have reached significance. Similarly, relationships between meanness, boldness and the recidivism measures may have reached significance with a longer follow-up period. Notwithstanding this limitation, our results showed that out of anyone with triarchic traits, those who are disinhibited are the most likely to recidivate and gain further convictions within 12 months of release.

**Regression analyses.** Once shared variance was accounted for within the simultaneous regression analyses, only the meanness scale remained significantly related with reintegration outcome measures. In the regression models tested, meanness evinced weak but significant positive relationships with violence risk scale and DRAOR scores, and weak significant negative relationships with release plan quality and probation officer ratings of the probation relationship scores. Zero-order correlations between boldness, release plan
quality and parolee ratings of the probation relationship, and between disinhibition, parole experiences, and DRAOR, were no longer significant once the shared variance between the triarchic scales was partialled out. These results can at least be partially explained by the small to moderate zero-order correlations between the triarchic scales. It is interesting that our sample was not a particularly mean sample \((M=37.69, \text{SD}=10.43)\), yet it was meanness, at least in our study, that continued to uniquely predict negative outcomes once shared variance was removed from analyses. We will discuss implications for meanness more widely shortly. Triarchic psychopathy appeared to make no other notable contribution to our tested reintegration outcomes. We will return also to this point shortly.

**Interaction effects.** Secondly, we tested whether boldness would exacerbate or attenuate an existing relationship between disinhibition, or meanness, and a negative reintegration outcome. Because of the DRAOR’s relationship with reconviction probability on parole, we looked at whether there was an interaction effect between parolees’ initial DRAOR scores and meanness or disinhibition scores (separately), at low, medium, and high levels of boldness. Interestingly, boldness was found to potentiate reoffending risk on parole when meanness was already present at either moderate or high levels (when meanness scores were at the mean, or at one standard deviation above the mean, respectively). This result is interesting as it is not foreshadowed by triarchic theory. To have a clinical presentation of triarchic psychopathy one needs to be sufficiently high on disinhibition, together with *either* boldness or meanness. The developers posit these latter two traits as being adaptive and maladaptive phenotypic responses, respectively, to the same harsh early developmental environment and failure of secure attachment; so presumably the two phenotypes cannot co-occur (Patrick et al., 2009; Patrick, 2010). Perhaps we might expect boldness therefore to potentiate disinhibition instead. However, boldness did not potentiate disinhibition in predicting negative or maladaptive outcomes, and this was consistent with two other studies.
TRIARCHIC PSYCHOPATHY AND REINTEGRATION

(Gatner et al., 2016; Vize et al., 2016). Gatner and colleagues (2016) further found that higher levels of boldness and meanness were associated with lower levels of impulsiveness and concluded that boldness instead acted as a protective factor for maladaptive outcomes. Indeed, some researchers are looking at psychopathic traits as putative protective factors for other psychopathologies including PTSD, although this work is still in its infancy (Anestis, Harrop, Green, & Anestis, 2017; Sellbom, 2015; Willemsen, De Ganck, & Verhaeghe, 2012, but see Brislin et al., 2017).

Our finding is partially consistent with hypothesised interaction effects between psychopathy constructs, for example, at lower levels boldness might be adaptive, yet at higher levels it tips normative functioning towards more maladaptive outcomes when combined with either meanness or disinhibition (Berg et al., 2017; Blonigen, 2013; Lilienfeld, Watts et al., 2015; Lilienfeld, Watts, & Smith, 2015; Marcus & Norris, 2014; Neo et al., 2016; Patrick et al., 2009; Smith, Edens, & McDermott, 2013). However, this finding is inconsistent with the idea that boldness pushes disinhibition across the line into psychopathy rather than just being a set of externalising behaviours, as triarchic theory would suggest (Patrick et al., 2009). It is unclear why boldness failed to potentiate disinhibition in this study. The interaction finding further strengthens the argument for retaining boldness as a key construct within psychopathy, at least in the interim until the construct can be further explicated. However, due to the lack of interaction effect with disinhibition, it would be beneficial to extend the testing of the effects of boldness on both meanness and disinhibition in both community and forensic samples, to confirm exactly which interactions occur in which combinations, and for which outcomes.

**Mediation analyses.** Thirdly, we investigated whether relationships between the triarchic scales and recidivism might be mediated through our other reintegration outcome measures. This allowed the testing of indirect relationships, despite few direct relationships
being revealed during the correlational and regression analyses. We found a significant partial mediation between disinhibition and recidivism through parole experiences measure scores. No other mediations we tested were significant. This partial mediation was significant for reconvictions (including parole breaches), violent reconvictions, and imprisonment, with reconvictions excluding parole breaches almost reaching significance. This suggests that although disinhibition no longer had a direct relationship with recidivism once variance between the triarchic scales was accounted for, disinhibition did appear to influence parolee experiences, which in turn have been found to be predictive of recidivism (Gwynne, 2016). As mentioned earlier, disinhibition was expected to have a negative relationship with parole experiences due to its constituent traits’ deleterious effects on indicators such as social support, and well-being. Only one other study has used mediation analyses with the TriPM, which looked at parental bonding (Craig et al., 2013). No mediations with the triarchic scales as predictor variables have yet been done and so this research serves as an important first step in furthering the use of mediation in psychopathy research. Overall, our hypotheses in regards to the triarchic scales’ relationships with various reintegration outcomes were not supported; triarchic psychopathy adds little information to reintegration outcomes. However, the results have provided some interesting observations and potentially fertile directions.

**Implications and Applications**

Psychopathy has long been seen as a driver or causative influence on reoffending behaviour (Hemphill, Templeman, Wong, & Hare, 1998; Serin et al., 1990; Skilling, Harris, Rice, & Quinsey, 2002). This has impacted on the treatment and management of offenders with psychopathic traits, particularly in regards to parole and high-risk offender management decisions, based on the idea that having psychopathic traits greatly increases one’s risk of recidivism (Andrews & Bonta, 1998; Wilson, 2004). However, our results overall directly challenge this notion, instead suggesting that psychopathy is not what we should be focusing
on in regards to preventing negative reintegration outcomes, making decisions about offender management (particularly regarding parole, and the imposition of liberty-restricting orders), and designing or allocating treatment. In regards to the PCL-R operationalisation, reoffending has typically been linked only with the externalising traits of Factor 2, which as mentioned earlier, are not unique to psychopathy (Skilling et al., 2002; Leistico et al., 2008). Using the triarchic conceptualisation within our study, we also found that psychopathic traits were not related with a static measure of reconviction risk at all, and were rarely related with a dynamic measure of general and violent reoffending risk, several relevant reintegration outcomes, or actual recidivism within 12 months of release. The intimation here is that there must be something other than psychopathy common to many HRVO which is driving the majority of negative outcomes for these parolees on re-entry. Based on our findings, we propose that meanness is this ‘something’ that should instead be the focus of treatment, reintegration interventions, and management and release decisions for HRVO, rather than global psychopathy scores. This finding is consistent with Lynam & Miller (2015), who state that antagonism (conceptually similar to meanness) is the defining characteristic of psychopathy, that is, the trait that causes negative outcomes. A further implication of our findings, is that the field of psychopathy should continue to study the components of psychopathy, in order to more fully and accurately increase the nomological network of the construct (Cronbach & Meehl, 1955). This is because as expected, we found differential and sometimes opposing relationships between the triarchic scales and our outcome measures.

Furthermore, because psychopathy has little bearing on reintegration outcomes, corrections and probation staff can confidently continue current initiatives such as release and safety planning, parole interventions, and desistance planning as normal, albeit perhaps with the added specific responsivity factor of meanness (factors specific to clients or therapists, including learning environments, which may affect the ability to successfully desist or
reintegrate through moderating learning success: Bourgon & Bonta, 2014). Competent reintegration efforts such as those Lloyd and Serin (2012) encourage, should not be affected by triarchic psychopathic traits. Our findings suggest that positive areas of focus such as increasing the quality of release plans, facilitating positive parole experiences, and creating an effective and trusting probation relationship, will go a long way in allaying recidivism and therefore increasing both parole success, and successful reintegration.

Secondly, the construct of boldness has been the centre of much debate, and polarising stances have often resulted. For example, Vize and colleagues recently concluded that it is now time that we “drop” adaptive traits such as boldness from conceptualisations of psychopathy (Vize et al., 2016, p. 584). However, our findings suggest that boldness should be retained at least until we can fully explicate the construct, as it may be implicated in worsening outcomes for parolees when meanness is already present at sufficient levels. Both of these findings suggest that probation staff, and corrections staff particularly responsible for the management of high-risk offenders, should treat meanness as an important risk and specific responsivity factor for treatment and intervention, rather than psychopathic traits. This could involve implementing strategies posited to be effective with all individuals, such as motivational interviewing both pre-release, and again on probation (Austin, Williams, & Kilgour, 2011; Rollnick & Miller, 2009). A growing number of studies have already shown motivational interviewing to be effective with offenders in prison, including violent offenders, treatment-resistant individuals, and those on probation (McMurran, 2009; Anstiss, Polaschek, & Wilson, 2011; Austin et al., 2011). Further, motivational interviewing has been used to steer individuals away from ineffective release plans prior to re-entry (Mann & Rollnick, 1996). Moreover, some researchers have already begun to investigate further how we might treat particularly mean people. Studies have shown that working on social cognitive variables such as moral disengagement in juvenile and adult individuals with
callous/unemotional traits may be more fruitful than directly trying to change entrenched mean traits (Walters, 2017b). Further, Bourgon and Guttierez (2012) found higher rates of desistance in the parolees of probation officers who regularly used cognitive intervention techniques in probation sessions. Due to meanness being constituted of both genetic vulnerabilities such as a difficult temperament, and a lack of secure attachment from neglect, abuse, or both (Patrick et al., 2009), it is easy to see how a mean character might become entrenched at the neurophysiological level of a person and have a lasting effect on cognitions and behaviour. For example, research has shown that the relationship between psychopathic traits and recidivism was moderated by individuals’ sensitivity to regret for their actions (Baskin-Sommers, Stuppy-Sullivan, & Buckholtz, 2016). A lack of regret or acknowledgement of harm to others makes treating mean people for criminogenic needs very difficult. However, using psychological treatment techniques to work on social cognitive variables, or cognitive behavioural factors like these first, to both enable and practise change within the safety of a treatment environment, may be at least part of the answer that treatment and probation staff can implement immediately (Bourgon & Bonta, 2014; Walters, 2017b).

Finally, from the results of our mediation analyses, we see that those who have better parole experiences are less likely to recidivate than individuals with poorer parole experiences. This suggests that by effecting interventions that positively increase parolees’ experiences and well-being, probation staff could have a positive impact on parolees’ ability to desist through reduced recidivism. This could occur both through the positive stabilising effects of connectedness, overall well-being and access to resources arising from good parole experiences, as well as through a decreased likelihood of engaging in recidivism within 12 months of release. This finding potentially informs what probation officers could focus on in probation sessions with parolees. An example might be aiming to increase a parolee’s mental and physical well-being through facilitating access to enjoyable physical activity that may not
have been accessible previously (such as boxing, crossfit, or dance). The positive effects of physical activity are many and may include opportunities for prosocial interaction, feeling good from the release of reward neurotransmitters, physically reinforcing aspects such as feeling and looking fitter or stronger, and having pride in setting and achieving goals through discipline. At a practical level, being ensconced in positive activities reduces idle time available to consort with antisocial peers and engage in offending behaviour.

Limitations and Future Research

The results of this study should be read with several limitations in mind. Firstly, owing to the paucity of prior research available on the TriPM scales, especially with HRVO, and more specifically in regards to reintegration outcomes, the design of this study was necessarily exploratory. Further, the archival nature of the data limited the depth of analyses that could be undertaken with the TriPM scales, such as being able to distinguish which triarchic trait contributed to a behaviour or event such as reoffending, and carrying out factor analysis of the items within the triarchic scales to assess opposing relationships between items and external correlates more fully. However, the goal of this study was not so much to explore psychopathy using the TriPM, but to see whether psychopathic traits are relevant in the reintegration of HRVO. This study importantly contributes to the literature concerning the TriPM, HRVO, and reintegration.

Secondly, the sample is of a modest size. Some effects did not reach significance within the sample that in a larger sample may have. This makes the generalisation of these results limited. Related to this is the low base rate for violent reconviction in this sample. Some relationships between violent reconviction and other variables did not reach significance because only 19% of the sample were reconvicted for violent reoffending within the relatively short follow-up period. Further, it is doubtful that these results would be representative of high-risk female offenders. Studies have shown that psychopathic traits are
less prevalent and may be more difficult to measure in females with current tools, leading to results needing to be interpreted with more caution than usual (Forth, Brown, Hart, & Hare, 1996; Salekin, Rogers, & Sewell, 1997). Further research should look to extend these findings in samples of female offenders, culturally and linguistically diverse samples, and young people.

Thirdly, the scoring on the TriPM did not evince much variability within our sample, presumably because the whole sample were HRVO, of whom many tend to have psychopathic traits (Dickson et al., 2013; Wilson, 2004). A lack of variability precludes the ability to be able to find relationships between variables, which may have impacted on our results. Despite this limitation, and even though our sample were not particularly mean, meanness continued to produce unique and significant relationships with some study variables.

Fourthly, we were not able to investigate causality in this study. Further statistical analyses using SEM were planned, however were not able to be continued with due to a lack of relationships found at the mediation analyses stage. Therefore, it is unclear whether significant negative outcomes such as recidivism occurred because a parolee was mean and bold which impacted their risk levels which led to recidivism, or because they endured poor parole experiences which is predictive of recidivism. Further research could look at the stability of psychopathy traits over time, in order to discover how much of any consequent change in recidivism over time was attributed to other important reintegration variables, such as parole experiences for example. Investigating the stability of psychopathy over time will help us to understand the predictive ability of psychopathic traits more accurately and fully by helping us to understand causality (Craig et al., 2013).

Finally, the measure of psychopathic traits that we used, the TriPM, also evidences some limitations. For instance, very little is known about meanness and how it is relevant in
offender outcomes. Meanness could exert its effects in various ways, for instance, sabotaging or otherwise interrupting the setting in place of protective factors (i.e. support relationships with community and religious organisations, and stable accommodation and employment). Alternatively, meanness’ antagonistic features could interfere with the engagement and learning of individuals within treatment programmes focusing on offenders’ criminogenic needs (Bourgon & Bonta, 2014). In reality it is probably a combination of both, however, further research using the meanness construct is needed to disentangle these possibilities and highlight others.

Similarly, several researchers have proposed that the boldness construct would benefit from further development, particularly in regards to referencing more maladaptive expressions of boldness (Crego & Widiger, 2016; Gatner et al., 2016; Miller & Lynam, 2012). It is true that there are positive and negative expressions of personality traits, and boldness is no different. For example, a courageous fearlessness could be very helpful in certain situations, and also lead to an exciting existence, however, an unfailing optimism together with high social dominance could turn into a narcissistic expression of boldness that is not helpful in reintegration. Many have suggested that perhaps it is at higher levels of boldness that the usually adaptive trait becomes maladaptive and less desirable, potentiating the core psychopathic traits of disinhibition or meanness. The triarchic model would benefit from an explication of the boldness construct in order to survey the maladaptive expressions of boldness more fully. Then, the resultant relationships with measures of external correlates could be infinitely broader and potentially more interesting; particularly if boldness was divided into its maladaptive and adaptive expressions in quasi-experimental designs.

Overall, triarchic psychopathy was rarely predictive of negative reintegration outcomes including recidivism in our study, and even less so when broken down into separate components. Meanness however, tended to continue to uniquely predict negative
reintegration outcomes once shared variance in the triarchic scales was accounted for. These
findings are supportive of a small body of research stating that meanness is an important
variable in the prediction of negative outcomes, including triarchic theory (Frick & Marsee,
2006; Frick, Ray, Thornton, & Khan, 2014; Lilienfeld & Widows, 2005; McCord & McCord,
1964; Patrick et al., 2009; Sellbom & Phillips, 2013). Furthermore, boldness was found to
potentiate the effect of meanness but not disinhibition in regards to a relevant reintegration
outcome: reconviction risk on parole. It is suggested that future research should elucidate
further what information meanness can provide in regards to the management, treatment, and
reintegration of high-risk offenders with mean traits, in the hope that we could more
effectively reach those who we have previously believed to be unreachable, and untreatable.
These findings suggest that psychopathy is perhaps not as important in the prediction of
successful reintegration as the field of psychology has previously surmised. That is, if one is
elevated on psychopathic traits, it has no particular bearing on whether or not they can
successfully integrate back into their communities. This may come as a surprise to many. In
truth this is a key finding of this study; psychopathic traits are not necessarily a barrier to
successful reintegration. That is a good thing, considering each year we return over 200
HRVO with psychopathic traits back into our communities with exactly that goal in mind.
References


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Appendix A

Table of Hervey Cleckley’s Psychopath Criteria

Hervey Cleckley’s 16 Psychopathic Criteria (reproduced from Cleckley, 1976)

<table>
<thead>
<tr>
<th></th>
<th>Considerable superficial charm and average or above average intelligence.</th>
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<tbody>
<tr>
<td>2.</td>
<td>Absence of delusions and other signs of irrational thinking.</td>
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<tr>
<td>3.</td>
<td>Absence of anxiety or other “neurotic” symptoms. Considerable poise, calmness and verbal facility.</td>
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<tr>
<td>4.</td>
<td>Unreliability, disregard for obligations, no sense of responsibility, in matters of little and great import.</td>
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<tr>
<td>5.</td>
<td>Untruthfulness and insincerity.</td>
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<tr>
<td>6.</td>
<td>Antisocial behavior which is inadequately motivated and poorly planned, seeming to stem from an inexplicable impulsiveness.</td>
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<tr>
<td>7.</td>
<td>Inadequately motivated antisocial behavior.</td>
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<td>8.</td>
<td>Poor judgment and failure to learn from experience.</td>
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<tr>
<td></td>
<td>Description</td>
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<tr>
<td>10.</td>
<td>General poverty of deep and lasting emotions.</td>
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<td>11.</td>
<td>Lack of any true insight; inability to see oneself as others do.</td>
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<td>12.</td>
<td>Ingratitude for any special considerations, kindness and trust.</td>
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<tr>
<td>13.</td>
<td>Fantastic and objectionable behavior, after drinking and sometimes even when not drinking. Vulgarity, rudeness, quick mood shifts, pranks for facile entertainment.</td>
</tr>
<tr>
<td>14.</td>
<td>No history of genuine suicide attempts.</td>
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<tr>
<td>15.</td>
<td>An impersonal, trivial, and poorly integrated sex life.</td>
</tr>
<tr>
<td>16.</td>
<td>Failure to have a life plan and to live in any ordered way (unless it is for destructive purposes or a sham).</td>
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</tbody>
</table>
Table 2. Hare’s Psychopathy Checklist Revised Criteria (reproduced from Hare, 2003)

<table>
<thead>
<tr>
<th>Factor 1: Interpersonal-Affective Scale</th>
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<tbody>
<tr>
<td>Facet 1: Interpersonal</td>
</tr>
<tr>
<td>1. Glibness/superficial charm</td>
</tr>
<tr>
<td>2. Grandiose sense of self-worth</td>
</tr>
<tr>
<td>3. Pathological lying</td>
</tr>
<tr>
<td>4. Conning/manipulative</td>
</tr>
<tr>
<td>Facet 2: Affective</td>
</tr>
<tr>
<td>5. Lack of remorse or guilt</td>
</tr>
<tr>
<td>6. Shallow affect</td>
</tr>
<tr>
<td>7. Callousness/lack of empathy</td>
</tr>
<tr>
<td>8. Failure to accept responsibility for own actions</td>
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<tr>
<td>Factor 2: Antisocial-Lifestyle Scale</td>
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<td>-------------------------------------</td>
</tr>
<tr>
<td>Facet 3: Lifestyle</td>
</tr>
<tr>
<td>9. Need for stimulation/proneness to boredom</td>
</tr>
<tr>
<td>10. Parasitic lifestyle</td>
</tr>
<tr>
<td>11. Lack of realistic long-term goals</td>
</tr>
<tr>
<td>12. Impulsivity</td>
</tr>
<tr>
<td>13. Irresponsibility</td>
</tr>
<tr>
<td>Facet 4: Antisocial</td>
</tr>
<tr>
<td>14. Poor behavioral controls</td>
</tr>
<tr>
<td>15. Early behavioral problems</td>
</tr>
<tr>
<td>16. Juvenile delinquency</td>
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<tr>
<td>17. Revocation of conditional release</td>
</tr>
<tr>
<td>18. Criminal versatility</td>
</tr>
<tr>
<td>Uncategorised Items</td>
</tr>
<tr>
<td>---------------------------------------------------------</td>
</tr>
<tr>
<td>19. Promiscuous sexual behavior</td>
</tr>
<tr>
<td>20. Many short-term marital relationships</td>
</tr>
</tbody>
</table>
Appendix C

Table of Mediation Pathways Tested

Table 3.

Standardized Coefficients, Standard Errors, p-values and Bootstrapped Confidence Intervals for Indirect Effects Tested in Mediation Analyses

<table>
<thead>
<tr>
<th>Indirect Effects</th>
<th>β</th>
<th>SE</th>
<th>p</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meanness → PEM → Recon inc</td>
<td>.02</td>
<td>.02</td>
<td>.16</td>
<td>-.004, .05</td>
</tr>
<tr>
<td>Meanness → PEM → Recon excl</td>
<td>.02</td>
<td>.01</td>
<td>.16</td>
<td>-.003, .04</td>
</tr>
<tr>
<td>Meanness → PEM → Violent</td>
<td>.01</td>
<td>.01</td>
<td>.15</td>
<td>-.002, .03</td>
</tr>
<tr>
<td>Meanness → PEM → Reimp</td>
<td>.02</td>
<td>.01</td>
<td>.16</td>
<td>-.003, .04</td>
</tr>
<tr>
<td>Meanness → VRS → Recon inc</td>
<td>.004</td>
<td>.003</td>
<td>.16</td>
<td>.00, .01</td>
</tr>
<tr>
<td>Meanness → VRS → Recon excl</td>
<td>.004</td>
<td>.003</td>
<td>.21</td>
<td>-.001, .01</td>
</tr>
<tr>
<td>Meanness → VRS → Violent</td>
<td>.01</td>
<td>.01</td>
<td>.10</td>
<td>.001, .02</td>
</tr>
<tr>
<td>Meanness → VRS → Reimp</td>
<td>.004</td>
<td>.003</td>
<td>.27</td>
<td>-.001, .01</td>
</tr>
<tr>
<td>Boldness → POR → Recon inc</td>
<td>.01</td>
<td>.01</td>
<td>.13</td>
<td>-.001, .02</td>
</tr>
<tr>
<td>Boldness → POR → Recon excl</td>
<td>.01</td>
<td>.01</td>
<td>.13</td>
<td>.00, .02</td>
</tr>
<tr>
<td>Boldness → POR → Violent</td>
<td>.01</td>
<td>.004</td>
<td>.17</td>
<td>-.002, .01</td>
</tr>
<tr>
<td>Path</td>
<td>B</td>
<td>SE</td>
<td>p</td>
<td>CI</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>------</td>
<td>------</td>
<td>-----</td>
<td>------</td>
</tr>
<tr>
<td>Boldness → POR → Reimp</td>
<td>0.01</td>
<td>0.004</td>
<td>0.10</td>
<td>0.00, 0.02</td>
</tr>
<tr>
<td>Boldness → PEM → Recon inc</td>
<td>-0.01</td>
<td>0.02</td>
<td>0.76</td>
<td>-0.05, 0.04</td>
</tr>
<tr>
<td>Boldness → PEM → Recon excl</td>
<td>-0.01</td>
<td>0.02</td>
<td>0.76</td>
<td>-0.04, 0.03</td>
</tr>
<tr>
<td>Boldness → PEM → Violent</td>
<td>-0.004</td>
<td>0.01</td>
<td>0.76</td>
<td>-0.03, 0.02</td>
</tr>
<tr>
<td>Boldness → PEM → Reimp</td>
<td>-0.01</td>
<td>0.01</td>
<td>0.75</td>
<td>-0.03, 0.02</td>
</tr>
<tr>
<td>Disinhibition → PEM → Recon inc</td>
<td>0.03</td>
<td>0.02</td>
<td>0.05</td>
<td>0.01, 0.07</td>
</tr>
<tr>
<td>Disinhibition → PEM → Recon excl</td>
<td>0.03</td>
<td>0.01</td>
<td>0.06</td>
<td>0.003, 0.06</td>
</tr>
<tr>
<td>Disinhibition → PEM → Violent</td>
<td>0.02</td>
<td>0.01</td>
<td>0.05</td>
<td>0.003, 0.04</td>
</tr>
<tr>
<td>Disinhibition → PEM → Reimp</td>
<td>0.02</td>
<td>0.01</td>
<td>0.04</td>
<td>0.003, 0.05</td>
</tr>
<tr>
<td>Disinhibition → DRAOR → Recon inc</td>
<td>0.01</td>
<td>0.004</td>
<td>0.20</td>
<td>-0.001, 0.01</td>
</tr>
<tr>
<td>Disinhibition → DRAOR → Recon excl</td>
<td>0.01</td>
<td>0.003</td>
<td>0.17</td>
<td>-0.001, 0.01</td>
</tr>
<tr>
<td>Disinhibition → DRAOR → Violent</td>
<td>0.004</td>
<td>0.003</td>
<td>0.24</td>
<td>-0.001, 0.01</td>
</tr>
<tr>
<td>Disinhibition → DRAOR → Reimp</td>
<td>0.004</td>
<td>0.003</td>
<td>0.19</td>
<td>-0.001, 0.01</td>
</tr>
</tbody>
</table>

*Note.* Bias-corrected bootstrapped 95% confidence intervals are reported. Significant p-values for indirect effects are shown in bold.
Appendix D

Figures 1-6: Full Results for Mediational Analyses

Figure 1. Mediation graph of results for testing whether the relationship between Meanness and Recidivism outcomes is mediated through Parole Experience Measure scores.

Figure 2. Mediation graph of results for testing whether the relationship between Meanness and Recidivism outcomes is mediated through Violence Risk Scale scores.
Figure 3. Mediation graph of results for testing whether the relationship between Boldness and Recidivism outcomes is mediated through Parole Experience Measure scores.

Figure 4. Mediation graph of results for testing whether the relationship between Boldness and Recidivism outcomes is mediated through Relationship Quality Scores – Probation officer version.
Figure 5. Mediation graph of results for testing whether the relationship between Disinhibition and Recidivism outcomes is mediated through DRAOR initial scores.

Figure 6. Mediation graph of results for testing whether the relationship between Disinhibition and Recidivism outcomes is mediated through Parole Experience Measure scores.