

The Development and Validation of the Successful Psychopathy Scale

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Abstract

Psychopathy is one of the most prominent predictors of antisocial behaviour and violence across adulthood and adolescence. However, emerging arguments within the literature suggest that psychopathy may have evolutionary benefits or an adaptive sub-type. After developing an operationalised definition of this adaptive variant, labelled successful psychopathy, this thesis used rigorous psychometric testing, including recaptured scale technique, deductive rationale strategy, and Rasch Analysis, to develop a Successful Psychopathy Scale (SPS). The SPS is a 54-item measure comprised of six facets: callous-unemotional traits, social potency, confidence, risk-taking, stress-immunity, and manipulation, which went on to show excellent reliability and generalisability in this thesis using generalisability theory. These facets map directly onto both historical and contemporary theoretical understandings of the adaptive features of psychopathy. Across three further empirical studies, the SPS showed excellent convergent validity with existing measures of prototypical psychopathy, as well as great predictive validity in relevant areas such as political skill, workplace performance, and socioeconomic status. Results have both theoretical and empirical application to the field of successful psychopathy and psychopathy more broadly in improving the understanding of psychopathy as a dimensional construct and demonstrating that psychopathy sub-types such as successful psychopathy can be qualitatively and quantitatively measured. The thesis closes with a proposal for how to use the unique contributions of knowledge documented within might underpin the development of skills-based workshops targeting leadership and management.

List of Publications

Wallace, L., Fido, D., Medvedev, O. N., Standen, B., Sumich, A., & Heym, N. (2022, May 23). The Development and Validation of the Successful Psychopathy Scale. *Under review in the Journal of Personality Assessment*.

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List of Abbreviations

- ACC - Anterior Cingulate Cortex
- ACE – Adverse Childhood Events
- ACME – Affective and Cognitive Measure of Empathy
- ANOVA – Analysis of Variance
- ASB – Antisocial Behaviour
- BCE – Benevolent Childhood Events
- BDI – Beck’s Depression Inventory
- BPAQ – Buss Perry Aggression Questionnaire
- B-Scan – Business Scan
- CA – Callous Affect
- CAPP - Comprehensive Assessment of Psychopathic Personality
- CTT – Classical Test Theory
- CU – Callous-Unemotional
- CUE - Caring Uncaring Emotional Inventory
- DAPTQ – Durand Adaptive Traits Questionnaire
- DC – Differential-configuration model
- DIF – Differential Item Functioning
- DS – Differential-severity model
- DT – Dark Triad
- ECR-R – Experiences in Close Relationships Revised
- EEG – Electroencephalography
- EFA – Exploratory Factor Analysis
- EL – Erratic Lifestyle
- EPA - Elemental Psychopathy Assessment
- FD – Fearless Dominance
- FFM – Five Factor Model
- fMRI - Functional Magnetic Resonance Imaging
- GC – Crystallised ability
- GESS – Generalised Expectancy for Success Scale
- GF – Fluid ability

G-Theory – Generalisability Theory
GV – Visual processing
ICC - Intra-class Correlation Coefficient
IGT – Iowa Gambling Task
IM – Interpersonal Manipulation
IRT – Item Response Theory
KMO - Kaiser-Meyer-Olkin
LOC – Locus of Control
LSMS – Life Success Measures Scale
LSRP – Levenson’s Self-Report Psychopathy
ME – Moderated-expression model
MRI – Magnetic Resonance Imaging
OFC – Orbitofrontal Cortex
PCA – Principal Components Analysis
PCL – Psychopathy-Checklist
PCL:SV – Psychopathy-Checklist Screening Version
PCL-R – Psychopathy-Checklist Revised
PM-MRV -Psychopathy Measure-Management Research Version
PPDPRCL -Psychopathic Personality Dimensions and Positively Reinforced Corporate Labels
PPI – Psychopathic Personality Inventory
PPI-R – Psychopathic Personality Inventory-Revised
PPI-R-SF – Psychopathic Personality Inventory-Revised Short-form
PRI - Five Factor Model Psychopathy Resemblance Index
PSI – Person Separation Index
PSI – Political Skills Inventory
QCAE – Questionnaire of Cognitive and Affective Empathy
RMM – Response Modulation Model
RPQ – Reactive Proactive Aggression Questionnaire
RST – Recaptured Scale Technique
SCI – Self-Centred Impulsivity
SCI – State Component Index

SD3 – Short Dark Triad
SEM – Structural Equation Modelling
SES – Socioeconomic Status
SGT – Stop Go Task
SMH – Somatic Marker Hypothesis
SP – Successful Psychopathy
SPS – Successful Psychopathy Scale
SRMCA – Self-Report Measure of Cognitive Abilities
SRP-4 – Self-Report Psychopathy (version four)
SRP-II – Self-Report Psychopathy (version two)
SRP-III – Self-Report Psychopathy (version three)
STAI – State-Trait Anxiety Inventory
SWB – Subjective Well-being
TriPM – Triarchic Psychopathy Measure
VM – Ventromedial
WCST – Wisconsin Card Sorting Task
WRP – Work Role Performance

Preface

Until recently there has been very little empirical evidence to either support or negate the existence of successful psychopathy, beyond the problematic taxonomic definition of “incarcerated” or “non-incarcerated” individuals as the aforementioned “successful” or “non-successful” psychopaths. The concept of successful psychopathy has been considered an oxymoron, as by definition personality pathology indicates one has impairments in certain aspects of life. However, early conceptualisations of psychopathy included the notion of *positive adjustment traits*, suggesting that individuals on the psychopathy spectrum may not always have maladaptive tendencies or diminished abilities. This thesis will explore these adaptive traits with an aim to determine whether successful psychopathy can be qualitatively and/or quantitatively defined.

Chapter One discusses the importance of investigating psychopathy from a dimensionality perspective, using both historical and contemporary accounts of the personality construct to address the potential for psychopathy subtypes. Most prominently, this chapter will discuss whether successful psychopathy exists and can be adequately measured. Successful psychopathy has been chosen as the main focus of this thesis to examine the facets of the psychopathic personality which can be considered potentially adaptive or beneficial in influencing positive outcomes for the individual. The findings from this thesis have potential to operationalise the way successful psychopathy is researched, provide support for the dimensionality of psychopathy, and indicate avenues for personal improvement.

Both a literature review (Chapter 1) and systematic review (Chapter 3) on the ideology, understanding, and application of psychopathy to realms of individual success will be provided. As such, the main facets of successful psychopathy are identified as callous-unemotional traits, social potency, confidence, stress immunity, risk-taking, and

manipulation. Moreover, individuals who score highly on these measures may exhibit increased cognitive empathy and cognitive skills, and report more stable childhood environments than those who would be characterised as exhibiting high prototypical psychopathic traits. In order to explore these hypotheses, this thesis incorporated cross-sectional, longitudinal, and behavioural approaches.

Chapters four through seven use cross-sectional and longitudinal psychometric measures to develop and initially validate the Successful Psychopathy Scale (SPS). This is achieved by identifying its primary traits, relationships between psychopathic traits and relevant subjective and objective success measures, as well as reliability and generalisability of the scale. The second part employs an experimental approach to investigate the role of risk-taking in successful psychopathy and how this is linked to adaptive behaviour and functional impulsivity. As such, this thesis entails a methodology chapter (Chapter 2), covering the robust methods, such as Rasch Analysis and Generalisability Theory, and approaches used within each part and identifying the key methodological justifications and limitations respectively. This thesis is split into two parts covering both the psychometric and experimental aspects of the research.

The first part reports four studies: (i) a cross-sectional study developing the SPS by means of reliability testing, Classical Test Theory (CTT), and Rasch analysis (Chapter 4); (ii) a longitudinal follow-up to examine the test-retest reliability of the SPS and its generalisability using G-Theory (Chapter 5); (iii) a cross-sectional study examining the concurrent validity of the SPS by examining the relationships between the SPS and existing self-report measures of prototypical psychopathy, as well as individualised expectancy for success across life domains (Chapter 6); and (iv) a further cross-sectional study examining the relationships between the SPS and predictor and outcome variables such as aggression, empathy, cognitive skill, and childhood experience (Chapter 7).

The second part of this thesis reports a pilot behavioural study (Chapter 8) aimed at assessing the association between successful psychopathy and risk-taking. This is examined by using the Iowa Gambling Task (IGT) which taps into factors often considered important in facilitating success, such as delayed gratification, impulsivity, and punishment sensitivity.

Finally, Chapter Nine brings together the main findings of the various studies and discusses how these answer the main research questions and map onto the understandings of psychopathy and its sub-types. As such major theoretical implications, as well as the main methodological contributions to the wider field will be highlighted, general limitations will be discussed, and directions for future research will be explored.

Chapter 1. Conceptualisation of Psychopathy

Psychopathy is one of the most intensively researched forms of pathological personality, and has long attracted the interest of clinical, personality, and forensic investigators (DeLisi, 2009; Hare, 1980; Miller et al., 2011). Psychopathy can be defined as a personality structure comprising interpersonal (e.g., deceitfulness, antagonism), affective (e.g., lack of empathy, remorse or guilt), and behavioural (e.g., social deviance, impulsivity) characteristics (Cleckley, 1941; Crego & Widiger, 2016; Neumann & Hare, 2008; Patrick, 2009) and commonly refers to a personality disposition encompassing superficial charm, manipulation, exploitation, and a disregard for the feelings and experiences of others (Hare, 2006). Often conceptualised as a personality disorder (Hare, 2003), and integrated into the most recent version of the Diagnostic and Statistical Manual of Mental Disorders V – (Appendix III ; American Psychiatric Association, 2013), psychopathy at clinical levels is mostly studied within forensic population samples, where it is thought to be represented in around 15-25% of offenders, relative to between 1-3% of the general population (Babiak et al., 2006; Hare, 2003).

Nevertheless, individual differences in psychopathic traits are also continuously, albeit non-normally, distributed within general populations (Edens et al., 2000; Marcus et al., 2004; Neumann et al., 2007). Psychopathy has been demonstrated to be a strong predictor of antisocial and criminal behaviour in both forensic and general populations, across adolescence and adulthood (e.g., Boddy, 2011; Boduszek et al., 2017; Hart et al., 1994; Ragatz et al., 2021) and is cited as one of the strongest predictors of chronic violent offending (Blair et al., 2001; Hare, 2003; Raine, 2002). However, both historical and contemporary conceptualisations suggest that psychopathy may have or have had an adaptive benefit as an evolutionary strategy or adaptive variant (e.g., Krupp et al., 2013; Lilienfeld et al., 2015; Mealey, 1995). These adaptive traits were also captured in the early days of its

conceptualisation with the seminal work of Hervey Cleckley, and the application of ‘positive adjustment’ traits which are still discussed and implemented today in some trait measures.

As further evidence of this, some studies (e.g., Lilienfeld et al., 2014) demonstrate positive associations between psychopathic traits and positive life outcomes and achievements, such as better leadership performance. As such, the use of the term “successful psychopathy” has gained traction in more recent literature (Fix & Fix, 2015; Osumi et al., 2007). However, before successful psychopathy can be fully defined and operationalised within this thesis, it is important to explore the construct of psychopathy more broadly, of which successful psychopathy will be subsequently considered a variant or sub-type.

Recent Conceptual Developments in Psychopathy Literature

Recent developments within the field of personality psychology have led to a systematic body of research investigating whether psychopathy, as defined by contemporary means, is taxonic (discrete class) or dimensional in nature (e.g., Edens et al., 2006; Guay et al., 2007; Steinert et al., 2021). According to the taxometric viewpoint, psychopathy is considered a distinct clinical construct based on existing cut-off points in clinical assessment (e.g., Psychopathic Checklist-Revised; PCL-R, Hare, 2003) whereby anyone who scores over 30 (25 in the UK, specifically) out of a possible 40 is considered a *psychopath*, and anyone below is not. However, findings supporting this perspective are mixed with some research demonstrating support for the taxometric view of psychopathy (Coid & Yang, 2008; Harris et al., 1994) and others not (Edens et al., 2006; Marcus et al., 2004; Skilling et al., 2002; Walters et al., 2008). Most of these studies (with the exception of Coid & Yang, 2008) were conducted using forensic populations, and as such could be problematic when assessing dimensionality; as they cannot be used to demonstrate whether psychopathy represents the extreme of a continuous trait distributed across the general population (Coid et al., 2009).

However, these studies were only able to demonstrate a clear taxon in regard to antisocial behaviours and not additional personality traits associated with psychopathy (see Edens et al., 2006 for discussion). There are also questions as to the applicability of these findings due to measurement variance in examining taxometrics (Bucholz et al., 2000; see also Osgood et al., 2002). On the other hand, the dimensional approach frames psychopathy as part of a continuum within normal personality functioning, with psychopathy being at the extreme end of one or many continuously distributed personality traits (e.g., Edens et al., 2006; Guay et al., 2005; Walters et al., 2008). Indeed, the rising body of evidence supporting dimensionality (see Clark, 2007) led to the idea that assessing degrees of psychopathic traits in aberrant and normal populations would be relevant, if not required, for studying psychopathy (Hare & Neumann, 2008). This lends credence to the idea that psychopathy or psychopathic tendencies can be assessed within the typical personality range (Wright, 2009), which is pivotal for research into positive adjustment traits and the successful psychopathy construct to continue.

Current evidence demonstrates the existence of psychopathy across a continuum whereby it manifests to varying degrees across individuals (Edens et al., 2011; Patrick, 2018; Pickles & Angold, 2003; Wright, 2009); supporting the dimensionality of psychopathic traits. This has also led to a shift in the literature whereby the term ‘psychopathic traits’ is more commonly used in place of ‘psychopath’, with this shift also having implications on experimental procedures. For example, the movement calls for studies of individuals demonstrating varying degrees of psychopathic traits rather than the focus being on discrete groups such as ‘psychopathic’ vs ‘non-psychopathic’ participants (Patrick, 2022).

Within this thesis, the dimensionality perspective will be applied. Viewing psychopathy as existing on a continuum supports the argument that variants of psychopathic personality may exist. Most prominently within contemporary literature is the notion of the

‘successful’ or ‘non-criminal’ manifestation of psychopathic traits. Research into this conceptualisation is still in its infancy, with considerable conflicting viewpoints and theoretical constructs lacking in empirical evidence. To shed light on the potential existence and construct of this variant, it is important to discuss how existing personality profiles are associated with success, how psychopathic traits could be applied to certain situational contexts that may garner successful outcomes, and ultimately how these individuals could be assessed within the general population. Moreover, to help explain the on-going development of the successful psychopathy sub-type, it is vital to explore early perspectives on psychopathy. Adaptive positive adjustment traits have always been part of the construct, albeit to differing levels due to variation in model construct parameters.

Historical Perspectives on Psychopathy

The seminal work detailed in Hervey Cleckley’s “The Mask of Sanity” (originally published in 1941) set the foundations of the study of psychopathy and has continued to be a vital point of reference for more contemporary researchers within the field of psychopathy (Patrick, 2006). Though Cleckley was not the first scholar to define the characteristics associated with psychopathy (see discussions in Arrigo & Shipley, 2001; Hervé, 2007; Pichot, 1978), he was the first to discuss in detail the key features of the construct. Furthermore, his conceptualisation became more familiar and prominent than any before him (Crego & Widiger, 2015).

The most salient feature of psychopathy described within his work is the outward appearance of credibility, normality, and “sanity” which works to conceal or “mask” a darker core. Indeed, he states *“It is a different kind of abnormality from all those now recognised as seriously impairing competency...The first and most striking difference is this: ... The observer is confronted with a convincing mask of sanity. All outward features of this mask are intact....”* (Cleckley, 1976, p.368). This conceptualisation is amplified throughout the

text by the identification of defining features of psychopathy including: a positive social demeanour marked by affability and agreeableness; an absence of anxiety, neuroses, or internalisation; and a disinclination toward suicide. The construct of the mask operating to hide underlying pathology is arguably the most distinctive feature of psychopathy, and the idea that these individuals could be undetectable within the general population and appearing psychologically normal has fascinated academics ever since it was first described.

Cleckley summarised traits and behaviours across fifteen individuals whom he felt represented the prototypical psychopath to give a foundation for diagnostic clarity and specificity. These became the 16 specific criteria (see Table 1.1) for psychopathy divided into three major groups (a) positive adjustment indicators (good intelligence and social adeptness, lack of delusions or irrationality, lack of nervousness, and low suicide rate); (b) behavioural deviance indicators ("unreliability," i.e., irresponsibility, sexual promiscuity, impulsive antisocial acts, failure to learn from experience, lack of any clear life plan, and increased recklessness when intoxicated); and (c) indicators of emotional unresponsiveness and impaired social routinization (lack of remorse or shame, poverty in affective reactions, egocentricity and inability to love, deceitfulness and insincerity, absence of loyalty, and deficient insight; Patrick, 2006).

Table 1.1*Cleckley's Criteria for Psychopathy*

Positive Adjustment	Behavioural Deviance	Emotional Unresponsiveness
Good intelligence	Unreliability	Lack of remorse
Social Adeptness	Failure to learn from experience	Lack of shame
Lack of delusions	Lack of clear life plan	Poverty of affect
Lack of nervousness	Increased recklessness when intoxicated	Egocentricity
Low suicide rate		Inability to love
		Deceitfulness
		Insincerity
		Absence of loyalty
		Deficient insight

Cleckley claimed that the quintessential psychopath possesses a paradoxical combination of characteristics. On the one hand, they are charming on the surface, anxiety-free, and articulate. On the other, they are guiltless, heartless, self-centred, and aimless (see also McCord & McCord, 1964). Psychopaths can easily deceive others into believing they are trustworthy as a result of this malignant combination of seemingly conflicting characteristics. Cleckley argued that psychopaths may easily be misidentified as normal individuals and that they tend to embody an average well-adjusted person. Additionally, he suggested that the prototypical psychopathic individual "...is likely to appear devoid of social or emotional barriers, from the small distortions, oddities, and awkwardness's that are so widespread even among the successful" (p. 338). Indeed, "everything about him suggests desirable and excellent human traits, a robust mental health," and "immediate psychiatric examination results reveal nothing abnormal" (p. 339).

Furthermore, Cleckley also described examples of successful psychopaths who had established careers as physicians, scholars, or businessmen. Furthermore, despite this not being elaborated on until much later, positive adjustment traits were included within Cleckley's original model and allowed for the association between psychopathy and success

to be introduced. The other prominent position in historical works, in contrast, is of psychopathy as a distinctly affectionless and predatory sort of criminal deviancy (*cf.* McCord & McCord, 1964). This latter perspective portrayed psychopathic individuals as cold, abrasive, and aggressively exploitative in their interpersonal actions. In particular, they claimed that individuals with psychopathic traits were deficient in social conscience and their inhibition of aggressive behaviour, and thus react to frustrating or threatening situations with rage rather than fear. Contrastingly to Cleckley who described these individuals as neither “deeply vicious” nor “explosive” (p.263), McCord and McCord (1964) suggested these individuals present as cold, vicious, predatory criminals. Different conceptualisations of psychopathy have emerged since the seminal contributions outlined by Cleckley. Below, the advent of these models and theories of psychopathy and its later subtypes, most notably successful psychopathy, will be discussed.

The Primary and Secondary Psychopathy Distinction

Karpman (1941/1948) was the first to propose a distinction between primary and secondary psychopathy, claiming that although these types are behaviourally similar, their motivational structures may vary. In line with Cleckley (1976), primary psychopathy is conceptualized as the product of fundamental affective deficits manifesting as a lack of conscience, impaired attachment, and a distinct absence of neurotic emotions such as guilt or anxiety. Primary psychopaths are driven by pathological narcissism, which propels their parasitic abuse and manipulation of others due to their lack of conscience. Moreover, primary psychopathy is considered to be an affective hereditary defect present at birth (Skeem, 2007), which is not influenced by environmental factors. Previous literature regarding psychopathy and the potentiality for success highlights traits associated with primary psychopathy as being more adaptive and beneficial than secondary psychopathy (Lilienfeld et al., 2012).

Contrastingly, secondary psychopathy is conceptualised as a result of having a conscience, which fails to function adequately (i.e., an affective disturbance) due to neurotic inconsistencies that are typically associated with negative childhood experiences, such as poor parental attachment or in some cases child maltreatment and is often considered an environmentally acquired disturbance (Skeem, 2007). Consequently, this *disturbance* manifests within secondary psychopathy as strong negative emotions and aggression, as well as neurotic affective emotions such as guilt, anxiety, and depression. These potent negative emotions are seen as driving a reactive or impulsive behavioural style, which is often associated with poor executive functioning (Ishikawa et al., 2001), antisocial behaviour (McCush et al., 2021), and less propensity for successful outcomes (Coyne & Thomas, 2008). Moreover, these findings are in direct contrast with the cold and calculated manner in which the primary psychopath would behave to ultimately exploit and manipulate others (Karpman, 1955), whilst not presenting an overt antisocial demeanour. This use of covert tactics can be beneficial within certain environments and allow the individual to reach positions of power due to their ability to self-regulate their emotions (Babiak & Hare, 2006).

Highlighting a further point of differentiation between the two, Karpman argued that only secondary psychopathy could in fact be responsive to treatment as these individuals have the basic fundamentals of a conscience, albeit a faulty one, whereas primary psychopaths do not. Therefore, there is no affective underpinning upon which to build therapeutic relationships and treatments. As such, a failure to account for these variations in response to treatment may dilute or conceal observable treatment effects. Thus, developing a better understanding of the psychopathy “sub-types” is relevant and vital to clinical practitioners and academics alike.

Trait Based Approaches

Trait-based approaches to psychopathy have garnered a wealth of empirical literature (Patrick, 2018), which has enabled clarification of heterogeneity within psychopathy and allowed links to be made between it and other personality constructs for example the big five, which describes the fundamental dimensions of normal personality across five dimensions; namely extraversion, agreeableness, conscientiousness, emotional stability and openness to experience (Mount et al., 2005) and narcissism (Driscoll et al., 2018; Lynam & Miller, 2014; Miller et al., 2016). With a disparity to prototypical approaches, which are defined by a composition of attributes, “traits” are systematic constructs, which assume a dimensional model of differences among individuals (Patrick, 2018). Traits suggest that processes are common for all, however individuals differ in the amount or level of said trait (e.g., all people can have their weight measured, but some will weigh more or less than others). There are three trait-based models of psychopathy that have been particularly successful in organising common behaviour and personality aspects, some of which are related to success, and have been used to identify processes and explain relevant subtypes. These models are operationalised in the following assessment instruments: Psychopathy Checklist Revised (PCL-R; Hare, 2003), the Psychopathic Personality Inventory (PPI; Lilienfeld & Andrews, 1996), and the Triarchic Psychopathy Measure (TriPM; Patrick et al., 2009).

Hare’s model of psychopathy proposes two main factors (Hare et al., 1990). Factor 1 demonstrates the affective (e.g., lack of empathy and guiltlessness) and interpersonal (e.g., superficial charm and grandiosity) aspects of psychopathy where Factor 2 focuses on the lifestyle (e.g., instability and impulsivity) and behavioural features (e.g., overt aggression and criminality). The PCL-R is a clinician rating instrument consisting of 20 items assessing the core features of psychopathy: affective, interpersonal, lifestyle, and behavioural facets (Berrios, 1996; Cleckley, 1976; Hare, 1991; Millon et al., 1998; Pichot, 1978). The PCL-R is

completed using a combination of structured interview and a review of historical file information on said individual. The instrument has been successful in predicting both violence and recidivism across Europe, North America, and Asia (see Hare et al., 2003 for a review). The development of this instrument was intended to be an operationalisation of Cleckley's criteria for psychopathy to be used within forensic settings, this intended purpose was further highlighted by the addition of items reflecting early behavioural problems and criminality (Hare, 1980). The instrument was assumed under a unitary model of psychopathy, therefore, several items alluding to positive adjustment were removed, as they were found to lower the internal consistency of the instrument, in favour of adding items relating to criminality and antisocial behaviour (Patrick, 2006). Consequently, this instrument moved away from the Cleckley psychopathy prototype minimising the influence of positive adjustment traits within psychopathic personality profiles and amplifying the antisocial and criminal behaviours (Cooke et al., 2007). Thus, the PCL-R became better at predicting recidivism in forensic populations (Hare et al., 2000), however lost some utility in examining psychopathic traits within general population samples (Skeem & Cooke, 2010) due to its conflicts with Cleckley's original profile and lack of generalisability to psychopathy subtypes, specifically adaptive ones.

Similarly, the PPI demonstrates consistency with both constructs of primary and secondary psychopathy. The PPI (Lilienfeld & Andrews, 1996) is a self-report inventory consisting of eight scales, which fall under two factors coined Fearless Dominance and Self-Centred Impulsivity (Lilienfeld & Windows, 2005; alternatively known as impulsive antisociality; Benning et al., 2003). Akin to Lykken's (1995) conceptualisation of primary psychopathy, the Fearless Dominance factor is composed of stress immunity, fearlessness, and social dominance, and has been evidenced as having positive correlations with positive emotionality, narcissism, and thrill seeking as well as negative associations with

internalisation (Benning et al., 2003; Lilienfeld & Benning, 2012). The Self-Centred Impulsivity factor encompasses interpersonal aggression, impulsivity, and blame externalisation and is positively associated with negative emotionality, blame externalisation, and substance abuse problems (Benning et al., 2003; Patrick et al., 2006). However, unlike the PCL-R, the PPI has been used in previous research investigating the relationship between psychopathy and success (e.g., Eisenbarth et al., 2022; Ullrich et al., 2008), but due to its roots in the primary secondary distinction it still emphasises antisocial behaviour and impulsivity to the same extent as primary affective features, which are less conducive to investigate the successful psychopathy construct.

The triarchic model of psychopathy (Patrick et al., 2009) sought to synthesise both theoretical and empirical evidence within the child and adult literature surrounding psychopathy centred around three constructs: Boldness, Meanness, and Disinhibition, and measured using a 58-item self-report instrument. The construct of boldness can be encapsulated by confidence, social assertiveness, venturesomeness, and resilience to stressors, which can be demonstrated within high pressure situations (Esteller et al., 2016). Boldness is intended to demonstrate an amalgamation of multiple psychopathy constructs namely, Cleckley's positive adjustment traits, fearless temperament (Lykken, 1995), and personality traits assessed by fearless dominance. Meanness is defined within this model as a lack of empathy and an aggressive interpersonal style, which manifests itself as cruelty towards others, vindictive and destructive aggression, arrogance, lack of close attachments, and premeditated violence (Patrick & Drislane, 2015). Meanness is most closely evident within PCL-R Factor 1, particularly the affective facet. The final construct is disinhibition which reflect a propensity for impulse control problems and externalisation (Krueger et al., 2007), bearing similarities to the PCL-R's Factor 2. Disinhibition manifests as behavioural impulsivity, irresponsibility, lack of honesty, and poor decision making, which may lead to

adverse situations (e.g., elevated stress reactivity; Patrick et al., 2009) and angry-reactive aggression (Gray et al., 2019). Disinhibition has also been positively associated with substance abuse (Bowns, 2019; Venables et al., 2018), anxiety (Drislane et al., 2014), and suicidal behaviour (Venables et al., 2015). In terms of intercorrelations, Boldness and Disinhibition are relatively independent, whereas Meanness shows a small to medium association with Boldness ($r = .30$) and a medium to large association with Disinhibition ($r = .45$) (Patrick, 2018). Regarding the TriPM's utility in investigating psychopathy subtypes, there has been research suggesting that this trait-based approach can be useful in this arena (Guo et al., 2022; Persson & Lilienfeld, 2019). However, there is still equal distribution between affective interpersonal features and behavioural ones which may not directly map onto more recent developments within successful psychopathy literature (Wallace et al., 2022; see Chapter 4), as there is still emphasis on disinhibited actions (e.g., "I enjoy physical fights") which potentially may be detrimental to success.

Criminality as a Core Component

At the heart of psychopathy, there is a lack of consistency in defining psychopathy as a latent construct. On one side of this debate, academics assert that early problematic and antisocial behaviours are integral and important to the construct, and even go so far as to suggest they are "critical" and "central" (Hare & Neumann, 2005, pp. 58 & 59) to psychopathy. However, there is a conflicting side to this debate whereby scholars maintain that criminal and antisocial behaviour should be considered as a secondary outcome, which may occur simultaneously but is not directly related to psychopathy nor specific to personality deviation in general (Cooke & Michie, 2001; Cooke et al., 2004). This ongoing debate stems back to the development of the original PCL-R, which seemed to demonstrate a disconnect between the measurement of psychopathy and its original conceptualisations (Cleckley, 1941; Karpman, 1948; McCord & McCord, 1964). The original concept included

more adaptive traits, focus on the affective and interpersonal, and placed less emphasis on the antisocial or criminal correlates (Skeem & Cooke, 2010). Instruments such as the PCL-R weigh antisocial behaviour as strongly as traits associated with emotional dysfunction causing a key question to emerge of whether criminality is a core component of psychopathy. The fundamental argument is that the two-factor approach is not based on any clear theory. The approach appears to be at odds with the Cleckleyan understanding of psychopathy, despite citing Cleckley as the foundation of the approach.

Fitting a theoretical framework to a measure-derived model seems less than ideal, even if the model is more consistent with an evolutionary perspective. The PCL-R (or any other measure) being reified could block progress in understanding psychopathy and moreover, this raises an issue of how behaviour relates to personality, “Few would confuse a behavioural act (e.g., an act resulting in a criminal conviction) with a personality trait (e.g., a disposition to commit crime). However, one can move from behavioural acts to personality dispositions through a process of inference.” (Skeem & Cooke, 2010, p.435). Though key characteristics associated with psychopathy have been correlated with individuals living a criminal or antisocial lifestyle (e.g., impulsivity and sensation seeking) through behaviours such as reckless driving (Luk et al., 2017), substance abuse (Smith & Newman, 1990), and thefts related to drug use (Weaver et al., 2021). Although it is worth noting that the lifestyle and antisocial facets of psychopathy have a greater relationship with criminal behaviour and higher rates of recidivism (Sohn et al., 2019). Individuals high in psychopathic traits are around three times more likely to reoffend both generally and violently than individuals with low psychopathic traits (Hemphill et al., 1998).

Although, Cleckley (1941) himself stated that while psychopathic individuals may transgress social norms in their behaviours, they did not always exhibit explicit antisocial behaviours. Therefore, as we move beyond this solely criminal characteristic of psychopathy

given the individual differences in talents and opportunities psychopathic traits may manifest themselves in one person's criminality, another's heroism, and yet another's worldly success (see Cleckley, 1976; Harkness & Lilienfeld, 1997; Lilienfeld, 1998; Lykken, 1995).

Additionally, the commercial success of "snakes in suits" (Babiak & Hare, 2006) further lends credence to the idea that traditional criminal activity is key to psychopathy (Hare & Neumann, 2005).

Taken together, existing measures of psychopathy which do not emphasise or include criminal or severe antisocial behaviours will probably demonstrate little utility in predicting violent acts (Salekin et al., 2006). However, these measures may better assess the psychopathic personality construct and enhance understanding from a researcher perspective, therefore it is important to distinguish between the use of risk measurements, and the assessment of an enduring collection of personality traits (Skeem & Cooke, 2010). The two should not become confused, as this can be misleading when talking about the construct of prototypical psychopathy and furthermore "successful psychopathy". It is key to separate the construct from its correlates and look back to the early conceptualisations of psychopathy as voiced by Cleckley, with a deeper understanding of the differences between personality and behaviour. Furthermore, it is important to note that individuals with psychopathic traits can and do live regular, non-criminal lives, and may never encounter the law or be incarcerated (Hare, 1996), calling the inclusion of criminality in the construct more into question as alternative sub-types are theorised, applied, and challenged.

Psychopathy as an Evolutionary Strategy

As this thesis moves beyond this criminal perception associated with psychopathy, psychopathic traits have begun to be considered an evolutionary adaptive strategy (Glenn & Raine, 2014), suggesting psychopathic traits may not exclusively apply to criminal populations, can exist across the human spectrum (Skeem & Cooke, 2010), and may indicate

various lifestyle typologies (e.g., individualistic) optimising modern day survival strategies (Lilienfeld et al., 2014). As previously mentioned, researchers such as Lilienfeld et al. (2014) have found positive connections between psychopathic traits and positive life outcomes, such as improved leadership performance, and social dominance.

Furthermore, the primary and secondary distinction has been discussed in terms of an evolutionary theory or survival strategy, which previous research has suggested could be considered the application of the adaptability of psychopathic traits or even successful psychopathy construct (Brazil et al., 2021; Da Silva et al., 2015; Glen et al., 2011). Mealey (1995) advanced an evolutionary analysis of psychopathy by incorporating a mechanism known as frequency-dependent selection, a type of selection that occurs when two or more strategies are maintained within a population at a particular frequency to each other. In this context it describes a social process whereby a small number of individuals may be able to maintain an exploitative, socially parasitic strategy in an environment when the majority of people embrace a cooperative strategy. For example, being part of a cohesive, reciprocally altruistic community could be considered adaptive due to heritable dispositions towards group solidarity and rule following being linked to human reproductive success (Dawkins, 1978; Ridley, 1997).

However, it has been hypothesised that this community approach could also create a niche for an alternative cheating (i.e., psychopathic) strategy (Harris et al., 2001; see also Mealey, 1995). When used infrequently, the approach can provide significant gains, but when used more frequently, it becomes less lucrative due to population anti-cheater vigilance and the greater likelihood that a cheater will encounter another cheater. Although psychopathic traits are assumed to exist on a spectrum, only about 1-3% of the general population is thought to be reaching a clinical diagnosis for psychopathy (Babiak & Hare, 2006; Hare, 2003) suggesting that it may be advantageous at this low frequency, thus the two strategies

are expected to be frequency dependent. Although, taking this strategy into consideration has potential application to psychopathy sub-types.

Psychopathy Subtypes

The idea of psychopathy presenting with subtypes has long been suggested (see Hicks & Drislane, 2018), however it was not until recently that this notion could be supported by the existence of large-scale empirical research (Patrick, 2018). Psychopathy subtypes have been evidenced in a variety of samples, across several measures, and different clustering variables (e.g., Drislane et al., 2014; Falkenback et al., 2008; Lee & Salekin, 2010; Vassileva et al., 2005). Moreover, this evidence has supported historical distinctions between primary and secondary psychopathic traits with both appearing antisocial. However, they exhibit distinct personality structures and behavioural manifestations with the primary subtype demonstrating greater affective-interpersonal features associated with psychopathy and secondary demonstrating more of the impulsive-behavioural traits.

When individuals with a particular pathology such as secondary psychopathy continuously demonstrate differences from those without, it is usually easier to form interpretations about the distinguishing elements of the disorder. In the case of primary psychopathy, however, it may be more like discovering a lack of differences that are consistent with Cleckley's (1941) theory that these individuals display a convincing "mask of sanity". That is presented as some sort of antisociality existing alongside a fairly muted personality structure that appears well-adjusted on the surface. This is not to say that people with high levels of primary psychopathic features are "normal," but it does mean that they are better at feigning normalcy compared to their secondary equivalents. An important point for future research is to identify how as well this "mask" fits within the successful psychopathy construct.

Conceptualisation of Successful Psychopathy

Five Factor Model and Psychopathy

Research into personality is often grounded in one of the most unique and important advancements within the field; The Five Factor Model (FFM; McCrae & Costa, 2005) which is also known as the five basic dimensions of personality: openness, conscientiousness, extraversion, agreeableness, and neuroticism (McCrae & John, 1992). These traits have been identified consistently across groups varying in age, sex, culture, and language (McCrae & Costa, 1997), and are suggested to be consistent across the lifespan (Ferguson 2010; Löckenhof et al., 2017; Terracciano et al., 2010), universal and hereditary (Jang et al., 1996), and with small but negligible alterations occurring in adolescence or early adulthood (McCrae et al., 1999; Roberts et al., 2001; Specht et al., 2011).

When we begin to look at the PCL-R model of psychopathy and the FFM we can see that Factor 1 is negatively correlated with agreeableness (except tendermindedness; Ross et al., 2004) and neuroticism (except impulsivity; Poy et al., 2014), and at times positively correlated with extraversion and openness (Derefinko & Lynam, 2006; Poy et al., 2014). However, Factor 2 is negatively correlated with conscientiousness, agreeableness (except modesty; Ross et al., 2004), and extraversion (Derefinko & Lynam, 2006; Positive Emotionality only; Ross et al., 2004), and positively correlates with neuroticism. The mixed findings within the results are not surprising given the argument for psychopathy as a dimensional construct, individuals along this spectrum may differ in their trait manifestation due to influencing factors or developing psychopathy variants (see Miller & Lynam, 2015 for a review on FFM and psychopathy subtypes).

When considering the higher levels of conscientiousness, openness, and extraversion in individuals within the Factor 1 cluster, this format of traits could be considered positive or adaptive (with the exception of low agreeableness in certain environments), lending credence

to the theory that primary psychopaths may be equipped with better tools for success, at least at the extrinsic level. The potential for adaptive traits changing the scope of prototypical psychopathy can be challenging given its forensic and clinical beginnings, however, this notion has been supported within non-forensic samples (e.g., Falkenbach et al., 2018; Howe et al., 2014; Lilienfeld et al., 2012). Therefore, it is not far-fetched to suggest the successful psychopath could indeed be a reality, dependent on how we conceptualise and measure the prototypical form.

Personality and Success

Personality can be considered as “a pattern of relatively permanent traits and unique characteristics that give both consistency and individuality to a person’s behaviour” (Feist & Feist, 2009, pp.10). Regardless of the variance in both modern theory and perspectives on personality, most would agree that there is a biological and genetic component alongside individual propensities which are shaped by our experiences and environment, and because of this our behavioural and emotional patterns are formed to establish our personality (Cloninger, 2009). Therefore, personality can provide insight into not only our commonalities but our differences also, by creating a conceptual framework from which to develop.

The role of personality in success is vital to understand in order to expand knowledge of different avenues into success and the variability in the skills needed to get there, both in terms of extrinsic and intrinsic success. Extrinsic success can best be defined as demonstratable and tangible success, for example, income, career level and other visible outcomes such as status (Judge et al., 1999) in addition to frequencies of promotions and leadership span (Gunz & Heslin, 2005). Intrinsic success would best be described as more subjective such as life, job (Judge et al., 2005), or relationship satisfaction and personal efficacy (Sobiraj et al., 2016), and has been adopted and operationalised as career satisfaction (Heslin, 2005). Overall intrinsic success should consider subjective indicators such as

satisfaction and goal attainment (Arthur et al., 2005). Each component of the FFM contributes to success, both extrinsically and intrinsically and is considered a foundation of personality development. Moreover, within psychopathy scale and theory development, the FFM is often a component of item development, and the traits are well delineated in psychopathy (Lynam & Miller, 2014). Therefore, the thesis incorporates this perspective and understanding into further operationalising success, and the construct of successful psychopathy.

Higher levels of extraversion have been linked to higher salaries and promotion frequency (Ng et al., 2005; Rode et al., 2008; Seibert & Kraimer 2001; Sutin et al., 2009), as well as higher levels of political efficacy (Cooper et al., 2013), and more positive evaluations (Furnham & Zacherl, 1986; McCrae & Costa, 1991). Moreover, research has demonstrated positive relationships between extraversion and more intrinsic values such as career satisfaction (Judge et al., 1999). However, there may be cultural differences regarding the associations between extraversion and success; Boudreau et al. (2001) found the link between extraversion and both salary and promotion in their sample of executives only applied in European but not American populations. It is worth noting that within this thesis, we sample only from UK participants with a view to mapping these findings onto other populations within postdoctoral study.

One of the most prevalent and discussed relationships within the big five is that of extraversion and neuroticism (Williams, 1992). Lower levels of neuroticism (or higher emotional stability) have been found to positively predict career success as indexed by progression, salary, and having leadership roles (Gelissen & de Graaf 2006; Judge et al., 1999; Ng et al., 2005; Sutin et al., 2009). Certain characteristics often associated with neuroticism, such as anxiety or emotional instability are likely to have a negative effect on job functioning both in terms of actual performance and interpersonal interactions, which

could in turn hinder any future progression and reduce prospects due to perceived lack of employability. For example, studies have consistently shown the association between higher levels of neuroticism and poor job satisfaction (Judge et al., 1998) stemming from the associated traits of anxiety and low self-esteem. Oppositely, emotional stability was found to be an influence on success for both salary and promotions (Boudreau et al., 2001) and one could argue this extends to job satisfaction. Thus, an individual scoring high on emotional stability would be expected to be calm under pressure and stress resistant, which are both considered to be somewhat related to both prototypical psychopathy and its successful variant.

The relationship between openness and professional success remains unclear. The majority of previous research found little to no effect (Boudreau et al., 2001; Judge et al., 1999; Rode et al., 2008; Sutin et al., 2009), whereas others have found both positive (Bozionelos, 2004; Ng et al., 2005) and negative (Seibert & Kraimer 2001) effects on salary. A potential reason for these mixed findings could be the career itself, some professions, such as office-based professions sampled within the above studies may not lend themselves to being good outlets for openness to experience. Individuals scoring high in these traits tend to have active imaginations and creative values, therefore they would find it easier to succeed in environments such as art, poetry, and adventuring (McCrae & Costa, 1985), which are not necessarily known to be high salary or have much scope for promotion. Moreover, individuals with high psychopathic traits are said to have little interest in creative aesthetics (Maibom & Harold, 2010) and more focus on career advancement (Boddy, 2010).

Similar findings have been demonstrated for conscientiousness, which has been shown to be an influence on success within some research (Judge et al., 1999; Ng et al., 2005; Sutin et al., 2009; Wang et al., 2021), and uncorrelated with success in others (Bozionelos, 2004; Rode et al., 2008; Seibert & Kraimer, 2001; Zhai et al., 2013). Conscientiousness refers

to an individual's ability to be dependable, driven, hardworking, and organised (Barrick et al., 1993) which suggests it would be a critical personality for functioning within a work environment as it promotes professional performance (Barrick et al., 1993), although this positive association between conscientiousness and extrinsic success has been shown to create a negative effect on work-life balance, causing work-family conflict (Michel et al., 2011; Wayne et al., 2004), which could in turn lead to dissatisfaction in the workplace. However, the overall presence of such discrepancies when researching conscientiousness suggests there are potential mediators or moderators that exist within this relationship altering the outcome (Huo & Jiang, 2021).

Agreeableness is not dissimilar to conscientiousness in that it appears to be a quality which would help improve interpersonal relationships and resolve potential workplace disputes, thus allowing the individual to be perceived more favourably within the workplace. However, agreeable individuals could be seen as softer and more naïve, allowing themselves to be easily manipulated and walked over (Ng et al., 2005) due to their desire to remain harmonious with others (Bruck & Allen, 2003). Therefore, they would receive less support and push from upper management. This could help explain the varying outcomes of agreeableness when looking at career success and satisfaction, as some studies reported positive correlations within certain occupations (Seibert & Kraimer, 2001), no significant relationship between agreeableness and extrinsic career success (Gelissen & de Graaf 2006; Judge et al. 1999; Sutin et al. 2009), and some even reported negative relationships between the trait and career success such as salary and promotion (Boudreau et al., 2001; Bozionelos 2004; Ng et al., 2005; Rode et al., 2008). Given the trait itself this desire to be liked by colleagues could cause inner conflict, with the lack of progression having an impact on intrinsic success. However, despite previous literature demonstrating how personality can map onto successful outcomes, the disconnection remains in the definition of success.

Disparity in the definition of success within psychopathy research and literature

As briefly discussed, the bar by which we investigate successful psychopathy is often set quite low, as being the lack of any evidenced criminal activity or incarceration (e.g., Yang et al., 2005). However, there has been a growing interest in how these individuals fair within different environments and under more stereotypical successful parameters (Hall & Benning, 2006; Lilienfeld et al., 2015; Smith et al., 2014). Although, before this can be accomplished the theoretical construct and conceptualisation of successful psychopathy needs to be better understood, and initially the working definition of success itself needs to be explored.

Success or successful behaviour can be defined in several different ways which are often dependent on the outcome achieved by the actions undertaken by the individual. Outcomes could be identified in terms of positive or negative consequences for the individual, and whether these consequences are relatively better or worse than those of others (Steinert et al., 2017). These outcomes could be down to a short-term behavioural action that occur across short periods of time or long-term behavioural activity that occurs across a longer span of time (see Table 1.2). This perspective is also supported by Lilienfeld et al. (2015) who suggested that success is short-or-long term accomplishments or behaviour that profits the individual or society. Furthermore, this success could be evaluated against other individuals or a standard level of performance, in addition to considering the relevance of both extrinsic and intrinsic success both in general and in relation to the psychopathy construct.

Table 1.2*An Overview of Successful Psychopathy Definitions*

No.	Definition
1.	Individuals scoring high in psychopathy and with high intelligence
2.	Individuals scoring high in psychopathy who refrain from antisocial behaviour
3.	Individuals scoring high in psychopathy who have never been convicted of a crime
4.	Individuals scoring high in psychopathy who are not incarcerated
5.	Individuals with psychopathic traits and high social status
6.	Serial killers who have escaped detection for a significant period of time

Note. Definition 1 originates in Cleckley (1941/1988). Definition 2 is adopted from Hall & Benning (2006). Definitions 3-6 are taken from Glen & Raine (2014, p.149).

Successful Psychopathy

Successful psychopathy is a construct which has attracted the interest of researchers and clinicians alike (Widom, 1977). The potential oxymoronic concept has been developed from the seminal work “The Mask of Sanity” by Hervey Cleckley (1941;1976;1999). Cleckley presented these individuals as having a personality disorder, which was not necessarily indicative of criminal or antisocial behaviour at its core, and he speculated that individuals with these psychopathic traits could be found at every level of society. Several of his case studies highlighted individuals who held the core characteristics of psychopathy (e.g., callousness, egocentricity, guiltlessness) but were able to adapt to society, and their traits then manifested in ways which did not ultimately lead to criminal incarceration. Other researchers have since developed on Cleckley’s (1941;1976;1999) initial understanding of the construct, and suggest that there could lie certain protective factors within the psychopathic personality, which could buffer against maladaptive outcomes, such as fearlessness and charm (Gao & Raine, 2010; Hall & Benning, 2006; Lilienfeld et al., 2015), and in addition

could prove beneficial within certain occupations, such as law, politics, business, and emergency services (Babiak & Hare, 2006; Skeem et al., 2011).

There is yet to be a solid conceptualisation or definition of successful psychopathy, but many scholars consider these individuals to be those who demonstrate the so-called core traits of psychopathy such as callous-unemotional affect, manipulative tactics, superficial charm, diminished anxiety, guiltlessness, and a lack of empathy or remorse (Cale & Lilienfeld, 2002) without engaging in criminal activity or overt antisocial behaviours, and are largely seen as functioning within society to prototypical standards, with some posited to have superior levels of functioning (Lilienfeld, 2015). However, there are several researchers who consider the term successful psychopath to be an inherent contradiction (e.g., Kiehl & Lushing, 2014); viewing the subject as somewhat of an oxymoron, as to qualify as an individual with a personality disorder there must be impairment of functioning in some areas of daily life, which would negate their ability to be classified as “successful”.

However, there are examples of individuals with various pathologies who have achieved successful and fulfilling lives (Grandin, 2010; Saks, 2007), therefore when you consider this, the potential for an individual with psychopathic traits becoming adaptive and ultimately successful does not seem as unlikely as it once may have. However, when we consider the successful psychopath, this does not necessarily mean an individual who is not impacted negatively in some way by their psychopathology, but an individual who is able to obtain success in one or more areas of their lives.

When considering the basis of successful psychopathy, it is important to consider the potential definitions that this label could be applicable to, the first and potentially most basic of these definitions of success would be having the ability to avoid the most undesirable outcomes (e.g., incarceration). Most psychopathy research is conducted within forensic or clinical populations and typically recruits incarcerated males; likely because these individuals

are easily accessible to the forensic researcher and often demonstrate higher levels of psychopathic or antisocial traits than the general population. Among individuals who have previously committed offences, those with high or intermediate levels of psychopathy were associated with higher levels of crime going undetected (Aharoni & Kiehl, 2013), however forensic settings are considered less useful for the study of successful psychopathy as regardless of how often this individual was able to evade arrest previously, they were eventually captured and incarcerated and failed in their criminal career (Gao & Raine, 2010; Ishikawa et al., 2001; Widom, 1977). The concept that successful psychopathy is simply the means of evading detection is far too simplistic, and based on the research conducted within forensic populations, this evasion does not last indefinitely. This basic approach in defining successful psychopathy does not represent the whole picture, particularly those who exist within the general population with psychopathic traits who never commit any criminal or antisocial acts and can be considered a very low bar by which to consider an individual as successful.

Criminal Versus Non-Criminal Psychopathy

Psychopathy was typically viewed as a purely maladaptive collection of personality traits culminating into psychopathology, however as examinations within this field have continued, some researchers have suggested that certain features of psychopathy are associated with success or may predispose an individual to successful outcomes (e.g., Babiak & Hare, 2006; Lilienfeld et al., 2014; McCord & McCord, 1964), in particular, areas often associated with calculated risk taking (e.g., business, law, politics, or first responder professions, Skeem et al., 2011). However, it was not until the 1970's that researchers began to investigate the possibility of these adaptive manifestations. One pioneering study within this area attempted to attract individuals with psychopathic traits from a community sample using an advertisement placed within a newspaper (Widom, 1977). The article attempted to

persuade individuals to take part in the study by asking for “charming, aggressive, and carefree people”, also suggesting they should be “impulsive”, “good at handling people”, and “looking after number one”. (p.675). Those who signed up to participate provided biographical and psychiatric information, as well as notifying the researcher of any engagement in criminal or antisocial behaviour. Many of these individuals held high occupational rankings and 65% met the criteria for sociopathy (the term sociopathy is still occasionally used; however, it is now considered outdated and not currently used in scientific research; de Brito et al., 2021). It can be said that these were not especially successful individuals due to their antisocial backgrounds, however they were able to evade detection of the legal system – fitting the early and more simplistic view of what successful psychopathy is. Despite its shortcomings, it was one the first ventures into psychopathy outside of forensic settings and the use of advertisements continues to be used to attract these individuals to take part in more contemporary research (Miller et al., 2012).

Successful or Non-Criminal Psychopathy?

According to Kiehl & Lushing (2014), the concept of successful psychopathy is an oxymoron because individuals with severe personality disorders are disadvantaged in all contexts. Although this is true in many ways (see Benning et al., 2018 for example), there are people with high levels of psychopathic traits who can attain "success," such as high-status positions, financial affluence, career stability, and so on, while still causing severe interpersonal and/or societal harm. Due to the difficulties in operationalising "success" (Belmore & Quinsey, 1994; Widom, 1977) and recruiting participants for such studies, the most common indicator of "success" in empirical research is avoiding involvement with the criminal justice system (Benning et al., 2018; Lilienfeld et al., 2015; Steinert et al., 2017; Widom, 1977). As a result, considering the distinction of criminal vs non-criminal psychopathy is considered more accurate, especially in the body of work where positive

outcomes have not been operationalised (Benning et al., 2018; Steinert et al., 2017). However, the broad assumption that non-criminality equals "success" is problematic for a variety of reasons (Steinert et al., 2017), including the fact that criminality does not always entail "failure" in psychopathy, and non-criminality does not always equal "life success.". Therefore, for the purposes of this thesis where the emphasis will be placed on positive outcomes, "life success", and non-criminality, the terminology of successful psychopathy will be used. Recent literature has proposed different hypothetical models of what constitutes successful psychopathy (Benning et al., 2018; Hall & Benning, 2006; Lilienfeld et al., 2015; Steinert et al., 2017). These models are considered neither mutually exclusive or overlapping in nature and tend to focus on potential distinctions between prototypical and successful psychopathy.

First, successful psychopathy is a form of sub-clinical psychopathy (e.g., a less severe manifestation of the construct). Second, successful psychopathy consists of a different configuration of traits adopting the dimensional perspective whereby prototypical and successful psychopathy are associated with different configurations of elevated traits. Third, successful psychopathy can be considered a moderated manifestation where the trait composition remains the same in both prototypical and successful psychopathy however additional variable moderate the expression of the personality construct. However, as discussed above there is a distinct lack of operationalisation of success within psychopathy research, with most research focusing on the aspect of non-criminality as a marker for "success". In order to investigate the potential for positive outcomes and life success and the applicability of the theoretical models, it is important to note the current conceptualisations of success within psychopathy which consider more aspects of functioning aside from non-criminality.

Successful Psychopathy or Machiavellianism?

Some discourse suggests "successful" psychopathy might instead reflect Machiavellianism (Stellwagen, 2011; Williams et al., 2010), a psychological concept that captures individual variance in pragmatist morality, cynical attitude on life, and strategic thinking (Christie & Geis, 1970). Given the manipulative and cruel nature of Mach, it is unsurprising that it is often examined in conjunction with psychopathy in studies exploring personality and antisocial behaviours (e.g., Carton & Egan, 2017; Jones & Neria, 2015; Pailing et al., 2014), however, Mach may not empirically exist at all.

The current measures of Mach seem to be nearly identical to psychopathy and contain elements that contradict theoretical explanations of Mach (such as disinhibition). As a result, it is challenging to characterise the true empirical nomological network of Mach, even with the help of multiple meta-analyses (Muris et al., 2017; O'Boyle et al., 2015, Vize et al., 2018). Future research using an improved method of assessment such as the Five Factor Machiavellianism Inventory (FFMI; Collinson et al., 2018) may help to address flaws in existing measures, however, the majority of existing empirical evidence indicate that Mach has been inaccurately conceptualised and thus is a casualty of the jangle fallacy (Kelley, 1927), wherein two seemingly different structures actually convey the same information. Due to the overwhelming evidence supporting the existence of psychopathy both theoretically and empirically (Cleckley, 1941; De Brito et al., 2021; Hare & Neuman, 2008; Levenson, 1992), Mach may represent aspects of psychopathy but is not empirically sound enough to stand alone. Furthermore, it has not been explored within the personality field to a high enough degree within this context to accept that Mach is "successful psychopathy", whereas there is little doubt that "successful psychopathy" is psychopathy (see, Hall & Benning, 2006; Lilienfeld et al., 2015; Steinert et al., 2017; Wallace et al., 2021 for ways successful psychopathy has been conceptualised).

Defining Success in Psychopathy

Understandably, the literature has yet to define a comprehensive, yet specific definition of success. After all, the term "success" can refer to a wide range of circumstances. For example, the term success can refer to both short-term and long-term behavioural outcomes such as fulfilment of immediate tasks, achievement of life goals, or intrapersonal growth (see Table 1.3). The degree of success reflected by these outcomes can then be evaluated objectively or comparatively. For example, success could be defined as the ability to meet an objective performance standard on a task (e.g., performance leads to an objectively correct or incorrect outcome), whether goals achieved are superior to the accomplishments of others (Dutton, 2012), or whether functioning is at a "normal" or typical level in comparison to others. Moreover, success in regard to psychopathy could encapsulate each of these small definitions under the umbrella of various domains.

Table 1.3

Types of success and evaluative criteria.

Duration of behaviour	Outcome	Evaluation
	Gain/increase	Objective
Short-term	Positive consequences	Relative
	Avoid/reduce	Objective
	Negative consequences	Relative
Long-term	Gain/increase	Objective
	Positive consequences	Relative
	Avoid/reduce	Objective
	Negative consequences	Relative

Note. Objective = degree of success is based on comparison to objective performance standard. Relative = degree of success is based on comparison to the performance of other individuals.

Psychopathology

Incarceration is one of the most prevalent and unfavourable consequences linked with psychopathic qualities (Gao & Raine, 2010), but there is another major undesirable outcome or barrier to success connected with psychopathy. Individuals who live a reckless, irresponsible, and impulsive lifestyle are more likely to experience health difficulties as well as face external consequences (Hervé, 2017). Karpman (1941) was one of the first to describe how psychopathy is linked to other psychopathological conditions, and he saw psychological distress and antisocial behaviour as being on the same spectrum. More recent empirical research has validated the link between psychopathy and numerous problematic behaviours such as substance misuse, rule breaking, and aggressiveness, particularly the impulsive antisociality portion (Patrick et al., 2005). Experiences of successful individuals with psychopathic traits are expected to still demonstrate rule breaking, however this will be less likely to result in legal difficulties and engagement with substance use would be purely for recreational purposes. Internalising psychopathology, such as anxiety and depression, is common in the general population (Office for National Statistics, 2000). Psychopathy's impulsive antisocial features are often associated with higher rates of anxiety, depression, and stress reactivity, whereas the core psychopathic traits (e.g., affective-interpersonal traits) are associated with decreased internalisation tendencies (Benning et al., 2005; Hall et al., 2004; Hicks & Patrick, 2006). As a result, an individual's susceptibility to internalising behaviours may be determined by their psychopathic trait configuration and based on existing conceptualisations of successful psychopathy that suggest the presence of core affective-interpersonal traits in the absence of strong impulsive-disinhibitory tendencies, they should be unaffected by psychopathological issues of this nature and should theoretically be able to attain successful or adaptive outcomes.

Attainment

Avoiding extreme negative consequences is a low bar to consider someone successful in life. Ullrich et al. (2008) attempted to investigate the links between psychopathic traits and life success, but the findings revealed negative associations between all aspects of psychopathic traits and several domains of life success, such as status attainment and intimacy attainment (as measured by LSMS; Parker & Chusmir, 1992). However, it should be noted that the PCL:SV (Hart et al., 1995) was used in this study, which, like the PCL-R (Hare, 1991) emphasises deviant, antisocial, and criminal behaviours (Patrick et al., 2007). As a result, the findings may only be relevant when psychopathy is substantially influenced by behavioural deviance, and they may not be the ideal fit for studying successful psychopathic traits within the general population, therefore it is important to consider alternative measurements of psychopathic traits within the general population and how they may manifest within the agency and communion dimensions of the interpersonal circumplex (Wiggins, 1991).

Agency and Corporate Psychopathy

The overall prevalence of psychopathy within society is complex and difficult to estimate, the most common placeholders are that of 1% of the general population (Hare, 2003) and up to 25% of the forensic population (Hare, 2003), however more recently there has been another population identified as potentially prominent for psychopathic traits to be observed, this being the corporate or business world, whereby an estimated 3.5% would be considered psychopathic individuals. Although, this prevalence may be underestimated as Cangemi & Pfohl (2009) argued that this percentage within the corporate world is considerably higher, and potentially not as well detected or researched. Moreover, Babiak et

al. (2010) suggested this percentage was closer to 4% in a sample of high-level managers within corporate and financial settings, which is considerably higher than the prevalence suggested within the general population (Coid et al., 2009; Neumann & Hare, 2008). As Hare (2002) once famously declared ‘not all psychopaths are in prison, some are in the boardroom’ (cited in Babiak et al., 2010, p.174).

Corporate psychopathy can be defined as an individual characterised with sub-clinical psychopathy, who functions within a corporate context (Boddy, 2005). These individuals are often undetected within organisations (Smith et al., 2014). There are many other labels by which they are known such as, executive psychopaths, industrial psychopaths, and organisational psychopaths. However, one of the more influential conceptualisations has been labelling these individuals as successful psychopaths those who differ from their prototypical, often criminal, counterpart by concealing their pathological temperament, demonstrating good self-control, and portraying an outward charismatic nature (henceforth, this thesis will use the terminology of prototypical and successful psychopathy to describe the constructs). This manipulative core is the most easily concealed and allows these individuals to gain the trust and confidence of their peers, which can in turn expedite the promotion process within corporate organisations and allow them to reach leadership or managerial positions (Mahaffey & Marcus, 2006), as they are adept at fooling others of their competencies and credibility, whilst their underlying behaviour may still be potentially destructive to the organisation. Common manifestations of corporate psychopathy include traits that could be considered leadership “red flags” such as poor team working abilities, difficulty in sharing credit or ideas, poor treatment of other, deceptiveness, inability to accept blame for wrongdoings, and impulsive aggressive behaviours (Babiak & Hare, 2006).

However, some of the fundamental psychopathic traits such as callousness, grandiosity, and manipulateness have been associated with an ability to act in a persuasive

manner in order to reach their own goals, make ruthless decisions, and make solid arguments where necessary (Hare, 1999). This amalgamation of traits could potentially be compatible with successful performance within corporate settings and within executive positions and ultimately rely on establishing and defending a good impression of their work ethic, rather than demonstrating good job performance (Babiak & Hare, 2006). Moreover, they suggested that this impression is simulated persona, which they describe as “forging the psychopathic bond” (Babiak & Hare, 2006, pp.74) whereby these individuals mask their own traits and present a reputable mask which mirrors and compliments their intended target in order to more accurately and appropriately manipulate said individual. These corporate psychopaths are said to be highly motivated and play a strategic game weighing up potential rewards versus risks within any environment to use to their advantage.

Empirical studies of psychopathy within corporate settings are limited (Babiak, 1995a, 2000b, 2007c; Babiak & Hare, 2006), and as it stands these few studies are largely made up of self-report measures which address constructs related to psychopathy, but not necessarily demonstrating solid understanding of the construct, such as Dark Triad measures (Gustafson, 2000). There are few instances of forensic or clinical psychologists conducting research within this particular field, perhaps due in part to a lack of access to corporate samples (Peterson et al., 2003). Moreover, as previously discussed, whilst the construct of the so-called “corporate psychopath” is fairly uniform, encompassing traits such as grandiosity, pathological lying, cold-heartedness, manipulative tactics, a lack of empathy and remorse, and superficiality (Hare, 2003), as well as the more environment specific traits (e.g., selfishness, power-hungry, great political skill, and being opportunistic; Boddy, 2011), the label applied to this individual is still unclear, whether it be corporate psychopathy, industrial psychopathy, or the more recent development of successful psychopathy. Questions remain regarding how to accurately define

these individuals and if they are in fact bound and tied solely to the corporate world, or if they exist across all occupational and personal spectrums.

Not dissimilar to the corporate psychopath, politics and psychopathy seem a likely fit. Great political skill or more generally leadership skill is an important outcome we should consider when discussing success and psychopathy. A prominent study investigating psychopathic traits and political leadership skill assessed 42 American presidents and which features of psychopathy were consistent with their psychological profiles further to their overall performance during their role (Lilienfeld et al., 2012). They used the Psychopathic Personality Inventory Revised (PPI-R; Lilienfeld & Windows, 2005) to conduct these assessments. Results demonstrated fearless dominance (FD), which is made up of social potency, stress immunity, and fearlessness, correlated positively with positive performance and impulsive antisociality, represented by carefree non-plan-fullness, impulsive non-conformity, egocentricity, and blame externalisation, positively correlated with negative performance and unethical behaviour. A leader demonstrating a full high scoring psychopathic profile would not be considered a desirable leader (Lilienfeld et al., 2012) and may be ineffective in their role (Dutton, 2016), however this is not to say they would not acquire this position. Whether or not particular psychopathic traits should be considered beneficial to those in a political leadership position could rest on which traits are most prominent (e.g., fearlessness, social influence, self-control, and stress immunity) or more negatively viewed traits such as impulsivity and self-centeredness, in addition to how high their respective levels of these traits are. Politicians who exhibit the former traits could be successful within society due to their ability to control their behaviour, plan ahead, and due to their overall charming demeanour (Palmen et al., 2018).

It is well documented that psychopathic traits have been identified within community samples and are present across many occupational arenas, in addition to being well aligned with those present within incarcerated populations, demonstrating the classic primary and

secondary variants (e.g., Falkenbach et al., 2014). Regardless of the overwhelming consensus apropos some psychopathic traits (callousness, egocentrism, and impulsivity), others such as the fearlessness/boldness related components remain debated as to their centrality (Lilienfeld et al., 2012; Lynam & Miller, 2012). Furthermore, studies within community samples have highlighted atypical manifestations in individuals with high levels of psychopathic traits, with some even demonstrating a positive association between high psychopathic traits and everyday heroism (e.g., Patton et al., 2018). These associations were first investigated by Lykken (1995, p.29) who speculated that ‘the hero and the psychopath may be twigs off the same branch’, and this notion has further been supported by Bronchain et al. (2020) who suggest fearlessness underpins both psychopathic and heroic dispositions.

Moreover, this perspective has been investigated by several researchers examining the prevalence of psychopathic traits within particular occupations, which may warrant acts of “heroic” behaviour. Previous research (Falkenbach & Tsoukalas, 2011) has demonstrated that individuals within these so-called “heroic” occupations tend to score higher on the FD factor than incarcerated offenders (as measured by the PPI; Lilienfeld, 1990; Lilienfeld & Andrews, 1996). Additionally, Smith et al. (2013) found that FD was most related to heroism and altruism towards strangers, suggesting this predisposition towards fearlessness, stress immunity, and willingness to take risks may contribute towards heroic acts, again when assessed using the PPI. This stress immune response may also play a role in other “heroic” professions such as those within the medical community. Pegum et al. (2015) found that consultants working at teaching hospitals scored higher on the PPI overall than those who work at general hospitals – with both groups scoring higher overall than the general population control group. This has also been further demonstrated in medical students seeking to become surgeons, who demonstrated higher scores on social influence and FD (Muscatello et al., 2017). Therefore, this suggests that there are particular professions

whereby psychopathic traits may be beneficial to some degree, however this may come at the cost of interpersonal relationships (Lilienfeld et al., 2016).

Communion

When discussing interpersonal relationships that take place for an individual with psychopathic traits it is important to keep in mind the distinction between social engagement (e.g., gregariousness) and social closeness (e.g., warmth). Individuals with psychopathic traits frequently interact with other people and it has been suggested that they do not demonstrate any deficits with theory of mind, for example the ability to deduce the thoughts and motives of others (Blair, 2006), however, a more recent meta-analysis emphasises that individuals with psychopathic traits have ToM deficits, specifically impaired abilities to understand others' feelings and intentions (Song et al., 2023). Moreover, psychopathic traits are negatively associated with empathetic concern for others (Blair, 2008; Mullins-Nelson et al., 2006; Seara-Cardoso et al., 2012), yet they have an engaging manner and often make great first impressions on people (Babiak & Hare, 2006). Individuals with psychopathic traits are more likely to befriend others for instrumental rather than affiliative reasons (Jonason & Schmitt, 2012), which could have an adverse effect whereby others may avoid interacting with the psychopathic individual in situations which require cooperation (Rauthmann, 2012). Reflecting on the historical conceptualisation put forth by Mealey (1995) who proposed that psychopathy was characterised by adaptive deceptive cheating, these individuals tend to prioritise quantity over quality in their intimate relationships (Jonason & Kavanagh, 2010), viewing these relationships as sources of fun rather than commitments they should remain faithful in (Ali & Chamorro-Premuzic, 2010).

Examining psychopathic success in communal sources has mainly been demonstrated through several short-term, often sexual partners (Hare, 2003; Jonason et al., 2009) and although this strategy has been theoretically suggested to link with better reproductive

success (Wiebe, 2004), there has yet to be any empirical research supporting this viewpoint (Glenn et al., 2011). Potential partners may also be sensitive to unsuitability of individuals with psychopathic traits to be appropriate mates: characters in vignettes who demonstrate prototypical psychopathic traits are often rated lower in terms of both short and long-term relationships (Rauthmann & Kolar, 2013). However, when presenting psychopathic traits to participants the wording is key, such as whether an individual is described as charming or superficially charming would have an influence in response. Moreover, the atypical manifestation of successful psychopathy could garner different outcomes when it comes to communal sources, whereby successful psychopaths could potentially be more equipped to mask their unsuitability. However, as stated above, this is speculative due to a lack of research within the area.

It is the perspective of this thesis that successful psychopathy involves a combination of avoiding negative consequences and achieving some level of agentic or communal success. The belief that avoiding loss of life or livelihood as a measure of achievement through the avoidance of serious antisocial behaviours is insufficient to classify someone as an unsuccessful or successful psychopath. However, a person might attain great levels of professional success while being mainly unsuccessful in life, or they can achieve high levels of success before spectacularly failing and no longer classify as successful (e.g., Belfort, 2007). As a result, it is critical to remember that the definition of a successful psychopath is fluid and subject to change based on experiences and life events. With this in mind, it is necessary to move forward with a theoretical model that explains how successful psychopathy manifests.

Models of Successful Psychopathy

Whilst models of successful psychopathy have been introduced within this chapter, they form the foundations of what this thesis will go on to discuss, therefore they are discussed below in further detail.

Sub-Clinical Psychopathy

Successful psychopathy can be considered a partial variant of the prototypical clinical psychopathy. This model postulates that an individual would demonstrate lower levels of the underlying mechanisms of psychopathy which account for the full expression of the disorder. As discussed previously, there are models of psychopathy and existing self-report measures (e.g., LSRP; Levenson et al., 1995), which indicate that antisocial behaviour (ASB) and criminality are central to the disorder (Hare & Neumann, 2010; Neumann et al., 2007), and a lack of demonstrable ASB would be indicative of a sub-clinical manifestation of the construct rather than an expression of the full clinical disorder.

Moderated Psychopathy

Moderated psychopathy suggests that there is a distinct relationship between psychopathic traits, their expression, and interactions with intervening variables. These moderating factors can shape and mould the behavioural expression of the individual, which in turn has an impact on the outcomes and their life progression. A key example of this would be ASB being diverted by certain compensatory factors such as, intelligence, talent, effective socialisation, or physiological attributes. An elaborated version of the Moderated-expression model was proposed by Steinert and colleagues (2017), which in addition to placing emphasis on the importance of defining success outside of forensic populations, argued the importance of identifying the core traits which underpin psychopathy which they suggest are the

affective-interpersonal traits (e.g., callousness, lack of empathy, shallow affect, and manipulativeness), which appear, at least in part, in several theoretical and empirical models, for example, Psychopathy Checklist- Revised (PCL-R; Hare, 2003), Factor 1 (Harpur et al., 1989; Lilienfeld, 1994), meanness (Patrick et al., 2009), and antagonism (Lynam & Miller, 2015).

The importance placed on the affective-interpersonal dimension and the notion that these traits formulate the core of psychopathy has been supported by expert ratings (Miller et al., 2016; Verschuere & te Kaat, 2020), item response theory (Tsang et al., 2018), network analysis (Tsang & Salekin, 2019), and subtype research (Sellbom & Drislane, 2020). In addition, Steinert et al. (2017) highlighted the importance of examining external factors and moderators which could potentially influence the manifestation of psychopathy, these could potentially be structural (e.g., substance use, intelligence, executive functioning), environmental (e.g., childhood experience, socioeconomic status), and contextual (e.g., setting, presence of authority figures).

Multi-Process Psychopathy

The mechanism of this model suggests that psychopathy should not be considered a unitary construct, as it involves separate underlying processes which contribute in diverse ways to produce the observable features of the disorder. It postulates that as a whole, psychopathy should not or is not associated entirely with maladaptive or adaptive functioning, instead suggesting that the amalgamation of processes which form the basic structure of psychopathy will have an influence on whether that individual will be more or less successful at life across various domains. This model can be seen a more thorough version of the earlier sub-clinical model, as it views successful psychopathy as involving high levels of core psychopathic traits, alongside low levels of dispositional tendencies which may foster or encourage maladaptive outcomes.

Synthesis

Each model provides alternative conceptualisations of the disorder or the manifestation of psychopathic traits, which help to explain the avoidance of undesirable outcomes such as ASB and highlight the potential for attainment of desirable outcomes. The models themselves are not mutually exclusive and could each be considered complementary approaches which address and explain various diverse issues. Therefore, throughout the thesis these models will be explored as to their applicability to the successful psychopathy construct to determine which, if any, of these models is theoretically and empirically sound.

Hall And Benning's (2006) Models of Successful Psychopathy

Based on the earlier conceptualisations of successful psychopathy, these theoretical models were expanded and further developed to provide a more in depth understanding of how these individuals become successful despite their potentially detrimental traits. Hall and Benning (2006) (see also Lilienfeld et al., 2015) put forth three theoretical constructs known as 'Models of Successful Psychopathy' to explain these atypical manifestations of psychopathic traits within the general population, namely the Differential-severity (DS), Differential-Configuration (DC), and Moderated-Expression (ME) models.

Differential-Severity

The Differential-severity model posits that successful psychopathy is a unitary construct whereby individuals differ only in the severity of the disorder's manifestations and intensity. This model implies that a *successful psychopath* encapsulates all the traits associated with psychopathy, but to a lesser intensity, having lower levels of callousness and manipulative tendencies and displaying fewer instances of reckless impulsive behaviours. This attenuation would allow them to be "successful" in comparison to their higher-intensity counterparts, as they would be better equipped to fit into society, thus, passing undetected by

any forensic or clinical body. However, this model's main limitation lies in its simplistic view of the construct and success as a concept, whereby success is defined only by the absence of negative outcomes (e.g., incarceration). As the model only accounts for average functioning within society, it fails to address any potential for superior functioning, and so, may not be a complete account of successful psychopathy.

The DS model suggests that psychopathy is a unitary construct, and like the argument made by Mahmut et al. (2008), postulates that successful psychopaths differ in the intensity of the manifestation of their core traits. They arguably demonstrate lower levels of callousness and manipulative tactics, as well as reduced reckless and dysfunctional impulsive behaviours. This adaptation would enable them to fit into society more easily and allow them to go undetected by any forensic or clinical organisation. However, this model is inherently flawed due to its simplistic nature and view of the construct, suggesting that successful psychopathy is characterised by the absence of negative outcomes and/or detection does not allow for any speculation as to superior functioning. Therefore, the model may not demonstrate a comprehensive view of the construct.

Differential-Configuration

The Differential-configuration model presumes that successful psychopaths share the same traits as a prototypical psychopathy yet may demonstrate additional traits such as conscientiousness, self-discipline, boldness, and low levels of agreeableness (Mullins-Sweatt et al., 2010), which may decrease negative outcomes associated with psychopathy and increase adaptability. The Differential-configuration model posits that the constellation of traits exhibited by those with psychopathic tendencies may differ in successful psychopaths, altering the behavioural outcomes. Mullins-Sweatt et al. (2010) suggested that successful psychopaths share some trait similarities with the prototypical psychopathic individual, however, demonstrate additional traits such as conscientiousness, self-discipline, and low

levels of agreeableness, which decrease the likelihood of negative outcomes and can assist in societal adaptation. Despite this model demonstrating the potential for successful outcomes, it suggests that the differences between successful and unsuccessful psychopaths lies primarily in the levels of conscientiousness (e.g., Mullins-Sweatt., 2010). The simplistic nature of this model makes it a less desirable explanation to adequately conceptualise successful psychopathy.

The DC model suggests that successful psychopaths may demonstrate a different constellation of traits when compared to their criminal counterparts, which reduces or eliminates the manifestation of antisocial behaviours. Mullins-Sweatt et al. (2010) argued that whilst the successful psychopath demonstrates all the core traits associated with psychopathy, they may also have additional more adaptive traits such as higher levels of conscientiousness (relative to unsuccessful or criminal psychopaths), which are associated with lower scores on multiple facets of conscientiousness (Miller et al., 2001), low levels of agreeableness, and self-discipline. The addition of adaptive traits such as these may influence behavioural outcomes and prevent antisocial or deviant behaviours. Although, this should not be considered the complete model for successful psychopathy, as it calls into question the core construct of psychopathy itself (Cleckley, 1941; Hare, 2003), whereby psychopathy levels can still be considered high with the reduction or absence of core psychopathic traits (i.e., callous-unemotional affect). Therefore, making the DC model less desirable in explaining the construct.

Moderation-Expression

The Moderated-expression model suggests that successful psychopathy is an atypical development due to emerging protective factors which includes stable socioeconomic status (Zwaanswijk et al., 2018), positive early childhood experiences (Dargis et al., 2016), and intact or superior executive functioning (Ishikawa, 2001; Thompson & Centifanti, 2018)

which diminish maladaptive outcomes. The foundation of the Moderated-expression model emphasises the link between the core psychopathic traits and external moderating factors. The lack of antisocial behaviour and deviant conduct is a result of employing additional external protecting factors such as resilience (Cleckley, 1976), intact executive functioning and higher autonomic responsivity (Ishikawa, 2001), and positive childhood experiences such as good attachment and parental upbringing within a family unit (Frick & White, 2008; Waller et al., 2013).

Some debate that higher levels of intelligence may also reduce the risk of deviant behaviours exhibited by those with psychopathic traits (Wall et al., 2013). These external variables may allow an individual to channel their psychopathic traits into more socially adept situations and reduce the propensity to engage in antisocial behaviours. The Moderated-expression model appears stronger than the Differential-severity and Differential-configuration models, due to its allowance for interaction between psychopathic traits and external variables, as well as maintaining the core psychopathic traits within its conceptualisation. However, there is not yet substantial evidence demonstrating that this model encapsulates the entire construct.

The ME model places emphasis on the link between core psychopathic traits and external factors which reduce the potential for antisocial and deviant behaviours. This is achieved by employing additional external protective factors such as, resilience (Cleckley, 1976), intact executive functioning and higher autonomic responsivity (Ishikawa, 2001), positive childhood experiences such as good attachment, and parental upbringing within a family unit (Frick & White, 2008; Waller et al., 2013), and stable socioeconomic status (Lilienfeld et al., 2014; Persson & Lilienfeld, 2019). It is also suggested that high levels of prototypical intelligence may also reduce the risk of potential deviant behaviours (Wall et al., 2013). These external factors may better equip an individual with psychopathic traits to

become more socially adept within society and thus reduce the likelihood of engaging with any antisocial behaviours. This model allows for a comprehensive view of the construct due to its relationship between internal and external factors (See Table 1.4), however, there is yet to be any clear research. This suggests one or all of these external factors are pivotal in altering behavioural outcomes of those with psychopathic traits, although based on this model they would be categorised as structural, environmental, and contextual.

Table 1.4

An overview of the Moderated-expression model of successful psychopathy

CU traits	Structural	Environmental	Contextual
Callousness	Addiction	Parental style	Authority
Cold-heartedness	Antisociality	Peer influence	Dangerous setting
Grandiosity	Fearless dominance ¹	Physical abuse	Demand
Manipulative interpersonal style	Functional/dysfunctional impulsivity	Socioeconomic status	Anonymity
Meanness	Intelligence	Educational level	Transparency
	Social potency		Behavioural norms

Note. ¹ indicates a moderator that has been considered a core psychopathic trait according to some theoretical models e.g., Miller & Lynam (2011). Moderators included above should be considered a non-exhaustive list based on the current literature and author speculation.

Structural, Environmental, and Contextual Moderators.

These moderating factors can be further divided in categories. The first of which are structural moderators. These are considered enduring characteristics such as temperament, personality, or schemas, and remain distinctive from “core” psychopathic traits such as callousness, cold-heartedness, egocentricity, and a manipulative interpersonal style, however they may modify the behavioural outcomes associated with these traits. Moreover, there are traits that are often considered part of the core psychopathic construct such as impulsivity and boldness, however these are not agreed upon within the literature, but would have potential to

be considered structural moderators. This sub-type of moderation typically has genetic or environmental origins, some key examples of which would be sex (Lishner et al., 2011), intelligence (Wall et al., 2013), and interpersonal acumen (Book et al., 2013).

Secondly, there are environmental moderators, which are formed by our developmental experiences and may interact with core psychopathic traits to alter behavioural outcomes. This particular type of moderator is moulded by learning processes which occur throughout one's lifespan. This suggests that one's learning environment could be important when considering potential outcome behaviours, for example an individual who has been exposed to aggressive or antisocial environments from an early age could be vulnerable to maladaptive outcomes when compared to an individual with the same traits from a more nurturing environment (Da Silva et al., 2015). Some key examples of this kind of moderator would be socioeconomic status (Lilienfeld et al., 2014; Persson, & Lilienfeld, 2019) or parental or caregiver experience (Ishikawa et al., 2001).

Finally, there are contextual moderators, which are less concrete in their definition. This type of moderator is based upon current situational factors which occur and determine whether an action or behaviour will have positive or negative outcome. This is harder to determine as it is largely based on both objective and subjective factors. A potential example of this contextual moderation would be use of language and the differentiation between one's peer group and one's superiors. If this situation was not moderated effectively it could lead to a negative outcome, for example if you were to respond incorrectly within a work environment, this could lead to disciplinary action.

Summary of Findings Within the Literature

Taken together, given the conceptual and empirical limitations of each of the proposed theoretical models, it is difficult to identify any one which could accurately encompass what "successful psychopathy" is, how it develops, and how it presents itself. It is

likely that an amalgamation of the model or perhaps two of the aforementioned models would provide the best fit for explaining the atypical development and application of these traits. However, this needs further investigation.

More recent developments within the field of psychopathy came the notion of adaptive psychopathic traits or successful psychopathy, of which this thesis will be focused on. To highlight the evolution of our understanding of psychopathic traits as potentially successful, this chapter demonstrated how early theoretical conceptualisations and empirical work (as part of clinical and forensic assessments which do not align with the conceptualisation of successful psychopathy due to the emphasis on antisocial behaviour, criminality, and pathology), and later developed trait-based approaches have informed the development of successful psychopathy due to the incorporation of dimensionality, associations with personality foundation, and allowance for sub-types. A methodological section demonstrated utility of measuring psychopathic traits via different psychometric measures within general population samples and to what extent these may be useful in studying successful psychopathy. Intrinsic to this understanding it was also important to consider the discussion of whether psychopathy should be considered taxonomic or dimensional. The next chapter will outline in more depth how the core methodological issues and approaches used within contemporary psychopathy related research are pertinent to this thesis.

Concluding Thoughts

Developing a scale for successful psychopathy is crucial for understanding how individuals with atypical psychopathic traits navigate society successfully and has implications across not only academic research fields but also areas such as organisational behaviour and personal development (Wallace et al., 2021). A psychometric tool designed to assess successful psychopathy would need to incorporate items that tap into adaptive traits,

social acumen, and positive interpersonal skills alongside traditional indicators of psychopathy. This tailored approach would enable researchers and practitioners to differentiate between individuals who exhibit psychopathic traits and those who demonstrate successful psychopathy, fostering a more accurate and comprehensive assessment of this intriguing and complex phenomenon.

Current measures like the PCL-R or SRP focus on maladaptive behaviours, missing the nuances of successful psychopathy—where psychopathic traits coexist with adaptive qualities. Existing tools may underestimate the prevalence of adaptive traits, leading to a skewed understanding (Cooke & Michie, 2001). A new measure should tap into adaptive traits and positive interpersonal skills, differentiating between psychopathy and successful psychopathy. Certainly, measures like the Triarchic Psychopathy Measure (TriPM; Patrick, 2009) do indeed represent a step towards addressing the limitations of traditional psychopathy measures by incorporating aspects of adaptive traits. However, whilst the TriPM is a valuable contribution that recognises the importance of adaptive traits in the psychopathy construct (Sutton et al., 2020), it's essential to assess whether it fully captures the intricacies of successful psychopathy. Successful psychopathy goes beyond boldness (Benning et al., 2018), as it involves the strategic and often socially desirable application of psychopathic traits to achieve personal or professional success.

A new measure tailored explicitly for successful psychopathy would need to delve further into adaptive aspects, considering factors such as interpersonal charm, emotional intelligence, and the ability to maintain positive relationships while still exhibiting psychopathic traits. By focusing on the specific nuances of successful psychopathy, a dedicated measure could provide a more accurate and comprehensive understanding of individuals who manifest psychopathic traits in adaptive ways.

Notably, the absence of an in-depth examination of sex effects in the thesis may be due to the recognition that psychopathy can manifest differently in males and females (Cale & Lilienfeld, 2002) and focusing exclusively on successful psychopathy traits and sex might require a more targeted investigation into gender-specific expressions of these traits, which was beyond the scope of this initial investigation.

Research Questions

This thesis aims to [1] explore the theoretical conceptualisation of successful psychopathy, [2] develop a psychometric measure to assess the traits of successful psychopathy within the general population, [3] validate the newly developed measure alongside existing psychopathy scales and relevant variables, such as empathy and aggression, and [4] explore the applicability of the scale to real-world decision making via a behavioural paradigm.

Chapter 2. Theoretical and Methodological Approaches

In order to address the research questions and aims posed in the Chapter 1, this thesis will employ both psychometric and experimental approaches to conceptualise, develop, and validate a measure of successful psychopathy applicable to a general population sample. An overview of potential theoretical and methodological issues will be discussed below.

Measurement Issues

Examining Psychopathy in General Populations

To date, research into psychopathic traits predominately involves forensic or clinical populations such as individuals who are incarcerated. However, not all individuals with high psychopathic traits are incarcerated, and as demonstrated in Chapter 1, emerging literature has moved towards examining the presence of psychopathic traits within the general population (Board & Fritzon, 2005, Ross et al., 2004). This suggests that psychopathy exists as a trait continuum, apparent across all population groups, and may even confer some kind of social advantage within certain populations (Levenson, 1992). Moreover, Cleckley (1941;1976) did not negate the possibility of identifying psychopathic subtypes within the community.

In general, evidence suggests that psychopathic traits can be assessed reliably, and measures are able to tap into the same constructs in non-institutionalised samples as they are in general population samples (Lee & Salekin, 2010). Furthermore, such research allows examination of similarities and differences between populations, which may provide further insights into how psychopathic traits manifest in individuals within normal settings, potential etiological factors, and highlight further pathways, for example, modulators to negative or positive outcomes (e.g., professional or academic success). Moreover, investigating

psychopathic traits within general population samples enables a better landscape for gathering evidence on successful psychopathy, that is not solely based on incarceration or recidivism rates, which are at best simplistic and at worst problematic (Benning et al., 2018).

Given Chapter 1's discussion of dimensionality in psychopathy and the understanding that psychopathic traits exist on a continuum justifies research within general population samples (e.g., Hare & Neumann, 2008). Inferences on the manifestations of the traits are typically made on the basis of linearity of relationships using correlational approaches, or comparisons between high versus low levels of expression of the construct.

The Use of Self-Report Data

Self-report studies are frequently used in and applied to personality research (Revelle & Oehlberg, 2008) and are often employed in studies of scale development (e.g., Cooke et al., 2012; Patrick et al., 2009; Widiger et al., 2011). Therefore, as the primary aim of this thesis is to develop a psychometric measure of successful psychopathy, the first part of this thesis is dedicated to examining research questions using self-report data. Personality can be described as constellations of relatively permanent traits that give consistency to an individuals' behaviour (Feist & Feist, 2009), which can then be measured using personality questionnaires and these self-report questionnaires can be advantageous in personality research as they assess an individuals' own unique perspective into their personality and behaviour (Paulhus & Vazire, 2007).

Assessing psychopathy with self-report measures has long been viewed with scepticism (Edens et al., 2000; Lilienfeld & Fowler, 2006) and yet several well-validated self-report measures of psychopathy currently exist, with some of the more commonly used measures including Psychopathic Personality Inventory (PPI; Lilienfeld & Andrews, 1996), Levenson's Primary and Secondary Psychopathy Scale (LSRP; Levenson et al., 1995), and the Self-Report of Psychopathy Scale (SRP; Hare, 1980; Paulhus et al., 2009). With the

evidence suggesting the inherent deceptive nature of psychopathy, the use of self-report measures may appear illogical, however, the development of these measures has a long history (Lilienfeld & Fowler, 2006).

Self-reporting has several advantages. Self-report measures frequently take little time, training, or other resources to complete. Moreover, they are logistically easy to administer and allow for large samples to be generated over short periods of time. This is in stark contrast to the PCL-R, which requires extensive semi-structured interviews and file inspection. Other benefits could include the capacity to examine response styles and the chance that, unlike interviews, impression control will be less of a concern in self-report (Lilienfeld & Fowler, 2006). The risk of dishonesty and lack of insight into one's own mind are obvious downsides of self-report, especially in the realm of psychopathy (e.g., Hart et al., 1994). It could be argued that the core features of psychopathy, namely, deception, manipulation, and a lack of insight could make individuals with high psychopathic traits unreliable reporters of their own psychopathic traits who are likely to demonstrate social desirability (e.g., falsely presenting oneself in a positive way) or malingering (e.g., falsely endorsing their own psychopathology; Book et al., 2006; Edens et al., 2000; MacNeil & Holden, 2006; but see Lilienfeld, 1994; Lilienfeld & Fowler, 2006 for a discussion).

However, evidence gathered from a meta-analysis demonstrated a negative relationship between self-reported psychopathy and social desirability (Ray et al., 2013). Furthermore, additional research revealed that this inverse relationship represents true psychopathic personality variance (i.e., poor social desirability; proclivity to violate social norms and customs), rather than a response bias (Verschuere et al., 2014). These findings, to some extent, mitigate concerns about positive response bias and highlight the validity of self-report psychopathy scales and ultimately evidence has suggested that despite the potentiality for 'faking good', individuals with psychopathic traits are willing and able to accurately

report on socially undesirable traits they hold and will not necessarily engage in positive impression management (Miller et al., 2011; Ray et al., 2013).

The Use of Existing Psychopathy Measures in Psychopathy and Successful Psychopathy Research

Existing measure of psychopathic traits used within both forensic and general population samples have demonstrated reliability and validity over time (Babiak et al., 2010; Forth et al., 1996; Neumann & Hare, 2008), however their applicability to the construct of successful psychopathy has never been discussed in any depth. Additionally, it is important to consider whether the development of a novel measure of successful psychopathy specifically is necessary if the existing prototypical measures are capable of accumulating the findings and validating the construct itself. As the development of a psychometric measure of successful psychopathy can only be considered necessary if existing measures are ill-equipped to do so, in this section several of the most used measures of psychopathic traits and their ability to measure successful psychopathy or positive adjustment are critically evaluated.

Psychopathy Checklist and Psychopathy Checklist Revised

Despite being explored in various forms throughout history (Cleckley, 1941a/76b), psychopathy did not become a well-defined clinical construct or a recognized personality type until the development of Hare's Psychopathy Checklist (PCL-R; Hare, 1991a/2003b). The development of the psychopathy checklist raised interest in psychopathy in clinical and forensic settings and is arguably consistent with some of the early clinical observations, which defined psychopathy by its personality traits and antisocial behaviour (McCord & McCord, 1964). Although, its factorial design and conceptual rigor is up for debate. Initially, the proposed two-factor solution of the PCL-R appeared stable and promising (Hare et al., 1980; Harpur et al., 1988), with Factor 1 consisting of items related to

interpersonal and affective functioning and Factor 2 consisting of statements associated with impulsivity and antisocial or deviant behaviours. However, although the scale has previously demonstrated statistical viability (Newman & Kosson, 1986), the conceptual basis for the construct is questionable as Factor 1 contains items that tap into grandiosity, propensity to lie and lack of guilt/remorse, which are not comparable, while Factor 2 contains impulsivity, antisocial behaviour and social deviance/criminality, which are not analogous (Bishopp & Hare, 2008). Furthermore, there are two items related to relationships and sexual behaviour within the PCL-R that do not map onto either factor.

Moreover, despite being used within various settings, the PCL-R was originally developed within forensic populations (Hare, 1980), which means the measure's development began in a population of incarcerated individuals who had previously engaged in criminal behaviour. The two-factor model is seemingly reliant on the relationship between psychopathic traits and criminal/antisocial behaviour (Cooke & Michie, 2010), which does not demonstrate inclusivity and calls into question its applicability to non-criminal samples. As discussed within the introduction, previous research conducted by Cleckley (1941;1976) and Lilienfeld (2014;2015) has demonstrated that positive adjustment traits, opportunities, and motivations can enable individuals with high psychopathic traits to demonstrate success across a variety of platforms. The two-factor model is inherently inadequate for identifying individuals with high psychopathic traits who live and act outside of forensic and clinical populations, adapt to their surroundings, and use their psychopathic traits to develop themselves and achieve levels of success. Furthermore, the two-factor model may also be considered overly inclusive because it relies on those who commit crimes and engage in antisocial behaviour, but this may not core to psychopathy and could instead reflect alternative individual differences that may contribute to behaviour (Blackburn, 1998).

Previously, researchers have argued that criminal activity should be considered an epiphenomenon and a correlate of psychopathy, however, it should not be considered a diagnostic trait or a measure of personality deviations (Cooke & Michie, 2001; Cooke et al., 2004). However, the PCL-R and its derivatives appear to rate criminal and antisocial behaviour as important as the core traits of psychopathy such as the affective and interpersonal mechanisms. Despite this measure being utilised mostly in forensic or clinical assessments, its derivatives such as the Self-Report Psychopathy scale (SRP; Hare, 1980; SRP-II; Hare et al., 1989; SRP-III; Neumann et al., 2012; Paulhus et al., 2012; SRP-4; Paulhus et al., 2017) are still often used in general population research. This calls into question the utility of this measure and its self-report measures within both general population samples, and more recently, within the field of successful psychopathy.

Self-Report Psychopathy Scale

The Psychopathy Checklist (PCL; Hare, 1980; PCL-Revised [PCL-R]; Hare, 1991, 2003) and its shorter screening version (PCL-SV; Hart et al., 1995) were difficult to administer within general population samples, and more applicable to predominantly forensic or clinical samples. Consequently, researchers have focused on the development of self-report psychopathy measures to be used in broader populations, which are considered reliable and valid when assessing psychopathic traits (e.g., Neumann et al., 2013; Ray et al., 2013).

The Self-Report Psychopathy Scale and its variants (SRP; Hare, 1980; SRP-II; Hare et al., 1989; SRP-III; Neumann et al., 2012; Paulhus et al., 2012; SRP-4; Paulhus et al., 2017) are long-standing self-report instruments that gained considerable empirical support in their ability to assess psychopathic traits. The original SRP scale was developed in the 1980s as a self-report instrument correspondent to the PCL (Hare, 1980), and has since undergone several revisions, including the SRP-II (Hare et al., 1989), the SRP-III (Neumann et al., 2012;

Paulhus et al., 2012), and the current SRP-4 (Paulhus et al., 2017). The SRP-4 is a 64-item self-report measure answered using a 5-point Likert scale, which can be applied to research within both forensic and general population samples. This measure uses the same two-factor, four-facet model as the PCL-R (Hare, 2003). These facets include Interpersonal Manipulation (IPM), Callous Affect (CA), Erratic Lifestyle (EL), and Antisocial Behaviour (ASB). The 29-item short-form version of the SRP (i.e., SRP-SF) supports a similar factor structure and both versions have demonstrated remarkably similar psychometric properties in terms of internal consistency as well as both relative and absolute fit indices (Declercq et al., 2015; Dotterer et al., 2017; Gordts et al., 2017; Mahmut et al., 2011; Neumann et al., 2015). However, despite its strong properties as a psychopathy measure, the SRP and all its iterations are essentially top-down self-report versions of the PCL-R, therefore, same reasons as above apply to its lack of applicability for successful psychopathy.

Levenson Self Report Psychopathy Scale

The LSRP is a self-report questionnaire that has been used extensively in psychopathy research. This scale was designed to index a two-factor model of psychopathy, similar to Karpman's (1948) primary versus secondary psychopathy distinction, and arguably the two-factor model of the PCL-R (Harpur et al., 1989), with the first factor reflecting affective and interpersonal aspects of psychopathy and the second factor reflecting impulsive and socially deviant aspects of psychopathy (Levenson et al., 1995). The LSRP has been used in empirical studies to demonstrate the dimensional nature of self-reported psychopathy (Walters et al., 2008) as well as positive associations with undesirable behaviours such as substance abuse, aggression, sexual coercion, criminal behaviour, diminished empathy, and poor response modulation (Brinkley et al., 2008a; 2001b; Lalumiere & Quinsey, 1996; Lynam et al., 1999; Salekin et al., 2014; Sellbom, 2011; White, 2014).

The LSRP has both undesirable and desirable psychometric properties when compared to other self-report measures of psychopathy. The latter includes the scale's relative brevity, which makes it less demanding for participants; the fact that it is in the public domain, making it free to use; and multiple studies that show the LSRP scale has construct validity, as is to be expected of a scale based on the two-factor model (Garofalo et al., 2019; Salekin et al., 2014; Tsang et al., 2017). In addition, positive associations between the LSRP scale and existing measures of psychopathy support its concurrent validity and positive relationships with antisocial behaviour and substance abuse as well as negative relationships with agreeableness and conscientiousness support its predictive validity (Horan et al., 2015; Levenson et al., 1995; Lynam et al., 1999; Poythress et al., 2010; Seibert et al., 2011; Verschuere et al., 2014). In addition, unlike other denominations of the PCL-R, the LSRP does not make any overt references to antisocial or criminal behaviour, despite Levenson believing it to be a key component, it was suggested that the scale could have suffered from criterion contamination and these items were therefore left out. However, there are other psychometric and conceptual issues with the scale.

Researchers using the LSRP have consistently reported low internal consistency of the Secondary scale (with Cronbach's alphas ranging from .60–.70), problems with the replicability of the two-factor structure (e.g., Brinkley et al., 2008; Sellbom, 2011), and some questionable aspects to its construct validity. Indeed, these latter issues include a failure for the Primary scale to negatively correlate with anxiety and neuroticism (as would be expected in Cleckley's (1941) and Lykken's (1995) conceptualisations of psychopathy). This highlights the scale's lack of applicability to the construct of successful psychopathy which has been conceptualized as having the fundamental psychopathic traits (e.g., lack of anxiety and internalisation) at its core. In addition, despite the lack of overt antisocial items within the LSRP, Levenson still hypothesized that psychopathic traits would always positively

associate with antisocial behaviour. Moreover, there would be no relationships between psychopathic traits and fearlessness (Garofalo et al., 2019), which directly contradicts the historical conceptualisations of the construct and the theoretical model of successful psychopathy in current literature (Benning et al., 2018; Lilienfeld et al., 2015; Steinert et al., 2017; Wallace et al., 2022).

Psychopathic Personality Inventory

The Psychopathic Personality Inventory (PPI; Lilienfeld & Andrews, 1996) and its revised version are two promising tests (PPI-R; Lilienfeld & Widows, 2005). Initial research into the psychometric properties of the original PPI found evidence of its use. The PPI is made up of eight subscales, each of which assesses a different psychopathic trait (Lilienfeld & Andrews, 1996). Seven of the eight subscales can be arranged into two higher order factors, according to exploratory factor analysis using the PPI: (1) Fearless Dominance (PPI-I) assessing the affective–interpersonal traits and consisting of the subscales “fearlessness,” “stress immunity,” and “social potency”; (2) Impulsive Antisociality (PPI-II), assessing behavioural–lifestyle traits and consisting of the subscales “impulsive nonconformity,” “blame externalization,” “Machiavellian egocentricity,” and “carefree non-planfulness”. The eighth subscale of “cold-heartedness” did not load on either PPI-factor, and it is evidenced that it may index propensities not accounted for by PPI-I or PPI-II, despite empathy impairment being at the heart of Factor 1 (PPI-III; Cold-heartedness; Benning et al., 2003a; 2005b).

As per standard prototypical psychopathy measurements, the PPI total score is positively correlated with antisocial behaviour (Edens et al., 2008) and fearlessness (Lilienfeld & Andrews, 1996). Additionally, it has demonstrated good convergent and discriminant validity with corresponding factors of the PCL-R (Berardino et al., 2005) and other self-report measures of psychopathy (Benning et al., 2005). Furthermore, the PPI-

factors are linked to theoretically relevant psychopathy components. PPI-I has been linked to antisocial behaviour (Benning et al., 2003), low fear and anxiety (Patrick et al., 2006), and a lack of behavioural inhibition (Uzieblo et al., 2007). PPI-II is linked to institutional maladjustment (Edens et al., 2008), externalizing behaviour (Benning et al., 2003), excessive anxiety (Patrick et al., 2006; Uzieblo et al., 2007), and fun seeking behaviour (Uzieblo et al., 2007). However, because it is frequently omitted from statistical analyses, little is known regarding the validity of the third PPI-factor of “cold-heartedness” (Benning et al., 2003).

Arguably, cold-heartedness is one of the core psychopathic traits, if following early conceptualisations such as Cleckley (1941), and one of the key theoretical underpinnings of successful psychopathy (Wallace et al., 2022, see Chapters 3 and 4). Therefore, despite the PPI demonstrating some of the positive adjustment traits and a lack of overt antisocial items, it still falls short of being an ideal measure of successful psychopathic traits.

Triarchic Psychopathy Measure

Regarding the emphasis placed on criminal and antisocial behaviour relative to the more favourable adjustment features (Cleckley, 1941/76) including fearlessness, social potency, and interpersonal dominance, the conceptualisation and assessment of psychopathy has varied greatly (McCord & McCord, 1964). In contrast to other measures of psychopathy, such as the PPI (Lilienfeld, 1990; Lilienfeld & Andrews, 1996), which tends to focus more on the traits of fearless dominance and social potency, some of the most commonly used measures of psychopathy (i.e., PCL-R; Hare, 1991; LSRP; Levenson et al., 1995) place a far greater emphasis on criminogenic features, either as items or outcomes. The Triarchic Psychopathy Measure (TriPM; Patrick, 2010) was developed to incorporate these opposing conceptualisations and enable a more mediated measure of psychopathic personalities. This measure highlights the need to combine historical and contemporary conceptualisations of psychopathy. Whilst most current measures of psychopathy do, to varied degrees, index the

three components of the TriPM (Boldness, Meanness, and Disinhibition), they do not fully account for all three constructs. For instance, the PCL-R focuses on the components of meanness but is less suited to measuring the equally significant construct of boldness.

Boldness, the first of the TriPM's three components, is emphasised primarily in early conceptualisations of "primary" psychopathy (Cleckley, 1941/76). Fearlessness, risk-taking behaviours, stress and anxiety resilience, a dominant interpersonal style, and high levels of self-confidence are characteristics of this component. When compared to other psychopathy measures, the boldness construct is strongly correlated with Fearless Dominance as assessed by the PPI (Lilienfeld, 1990; Lilienfeld & Andrews, 1996), and to a lesser extent, the interpersonal subset of items (e.g., superficial charm, deceptive/manipulative tactics, and grandiose nature) within the PCL-R. *Meanness* deals with an individual's propensity for being callous, lacking in empathy and guilt, and engaging in wilful cruelty. Meanness can also be used to characterise shallow and emotionless connection patterns as well as the exploitation of others in order to further one's own objectives or wants. It is comparable to the Affective facet of the PCL-R and is also represented by the Machiavellian ego and cold-heartedness subscales of the PPI, however, it is most closely related with the construct of callous-unemotional traits as measured by the Inventory of Callous-Unemotional Traits (ICU; Frick, 2004). Lastly, the TriPM defines *disinhibition* as a lack of impulse control and inadequate self-regulation. High disinhibition construct scorers frequently demand immediate gratification for their efforts and have a poor threshold for unpleasant feelings. This construct has a direct association with externalization (Krueger et al., 2002) and disinhibitory reactions. This construct shares characteristics with Factor 2 of the PCL-R, most notably the Lifestyle construct and the PPI's Self-Centered Impulsivity construct.

Adaptive Features Within Psychopathy Scales and Their Relevance to Successful Psychopathy

The PPI and TriPM measures incorporate adaptive components that may be useful in the context of successful psychopathy. The PPI separates eight psychopathic traits into two main categories, the PPI-I (fearless dominance) and PPI-II (impulsive antisociality; Lilienfeld & Widows, 2005). Whilst the PPI-II evaluates negative personality traits, the PPI-I concentrates on adaptive traits including social graces, stress and anxiety resistance, and fearlessness. The association between PPI-I and psychopathy is considered controversial with some researchers debating its relevance to psychopathy as at its core it is defined by boldness or fearless dominance, both of which some researchers believe have no association with psychopathy (Berg et al., 2013; Blonigen, 2013; Lilienfeld et al., 2012; Lynam & Miller, 2012). However, numerous studies have highlighted the benefits of high PPI-I traits due to their relationship with adaptive personality traits, including better attentional control (Baskin-Sommers et al., 2009), reduced provoked violence (Camp et al., 2013), higher levels of self-esteem and stable happiness (Durand, 2016a; 2018b), and resilience to stress, fear, and anxiety (Dindo & Fowles, 2011; Uzieblo et al. 2010).

As stated within Chapter One, certain scholars have connected conscientiousness to the idea of successful psychopathy. Conscientiousness is centred around traits such as forward planning, goal-directedness, self-discipline, and delayed gratification (Roberts et al., 2009) and has been identified as playing a key role in determining successful from unsuccessful psychopathy (Clower & Bothwell, 2002; Mullins-Sweatt et al., 2010). However, conscientiousness is poorly associated with fearless dominance; hence the component may not fully explain successful psychopathy (Lilienfeld et al., 2015), rendering the PPI overall ill-equipped to adequately measure the construct.

The TriPM's conceptualisation is based on Cleckley's (1941a/1976b) list of positive adjustment features and places less emphasis on criminality and antisocial behaviour, which

are frequently outcomes rather than predictors of those behaviours, making it potentially viable to assess positive adjustment traits within psychopathy based on its composite design. While boldness alludes to adaptive qualities like social charm, fearlessness, and stress resilience, disinhibition and meanness assess the psychopathy's maladaptive side. Whilst the TriPM does incorporate positive adjustment traits and does not have overt antisocial items, it is still not considered an ideal fit for assessing successful psychopathy. The positive adjustment traits outlined by Cleckley go beyond simple Boldness, and this is still a very basic understanding of the construct and does not account for potentially increased conscientiousness, agreeableness, and drive. For example, like the PPI, the TriPM adaptive component of boldness was also unrelated to conscientiousness (Blagov et al., 2016), and whilst this is not the only element of the successful psychopathy construct, it is an important one. This suggests that the TriPM may not be any better than the PPI when it comes to measuring successful psychopathy.

Thus, the range of adaptive qualities measured by the PPI-I and boldness is constrained, and they are not correlated with conscientiousness. Furthermore, a recent study attempted to demonstrate the utility of the TriPM in measuring successful psychopathy (Guo et al., 2022) against validity measures derived from the Elemental Psychopathic Assessment (EPA; Lynam et al., 2011), but they did not incorporate any objective measures of success when defining the latent profiles, and therefore, cannot make any assertions as to its validity in determining success related outcomes, such as promotion, monetary gain, or life satisfaction.

PPI-I and boldness do incorporate some features suggested by Cleckley as typical traits seen in psychopaths that might be considered adaptive (i.e., absence of delusions and absence of irrational thinking). Cleckley (1988) went into greater detail about typical associated features identified in psychopaths, such as an absence of depression, mood swings,

or worries, even though they were covered within the part regarding absence of delusions (p. 339). It is probable that the PPI and TriPM's predictive usefulness for identifying successful psychopathic persons is subpar due to the small number of adaptive qualities they examine, and they would benefit from extending into the wider adaptive psychopathic traits, in addition to considering how the maladaptive traits associated with psychopathy could still bring success on an individual level.

Taken together, the existing measures of psychopathy are not equipped to accurately assess this successful subtype of psychopathic personality for several reasons: dilution of positive adjustment traits, weighing criminality as important as core affective traits, criterion contamination, lack of association with positive or adaptive outcomes or traits, and motivational factors. The idea that individuals with high psychopathic traits might have reasonably normal/successful lives if their degrees of antisocial behaviour are ordinary presents a challenge for modern conceptualisations of psychopathy. This is because the most used measurement tool, the PCL-R, has begun to see antisocial behaviours as a factor in detecting psychopathy (Hare, 2003). Therefore, it may be necessary to construct two definitions of psychopathy — a clinical/legal definition and an empirical one — in order to avoid necessarily associating it with violent and antisocial behaviour. In this way, it is not contradictory to discuss "successful" psychopathy while also defining psychopathy as a condition that is somewhat dependent on failure (to abide the rules of society).

Therefore, the current thesis aims to make a unique methodological contribution by developing an empirical scale to measure successful psychopathy. By considering pre-existing measures of prototypical psychopathy, positive adjustment traits, and early conceptualisations of the personality construct, a newly developed measure could more accurately address successful psychopathic traits within general population samples.

It is worth noting here that there has been a recent development in the field of adaptive psychopathy measurements. The Durand Adaptive Psychopathic Traits Questionnaire (DAPTQ; Durand, 2019) is a 41-item self-report measure with 9 sub-scales namely, leadership, logical thinking, composure, creativity, fearlessness, money smart, focus, extraversion, and management. Based upon the authors own assertions, this is not a measure of psychopathy or psychopathic traits, only of adaptive correlates known to have relationships with psychopathy (Durand, 2019), and it is primarily cited as an adaptive traits measure, not a psychopathy one (e.g., Bronchain et al., 2021). Therefore, this measure would not be considered a psychometric measure of successful psychopathy and has no bearing on the novel successful psychopathy scale under development within this thesis. For completeness, the DAPTQ will however be incorporated in Chapter Five, alongside current existing measures of prototypical psychopathy, which aims to address the convergent and divergent validity of the scale to be developed (see Chapter 4).

Operationalisation of Success and The Measurement Issues with Socioeconomic Status (SES)

This thesis' methodology had to assess not only the challenges related with psychopathy, but also the concept of success, which can be measured subjectively or objectively. Socioeconomic status (SES) is a term that can be defined objectively and subjectively (Adler et al., 2000; Kraus et al., 2012). The absolute level of material resources that one possesses is commonly indexed by one's income level (e.g., Diener et al., 1993; Howell & Howell, 2008), educational attainment (e.g., Witter et al., 1984), or a combination of both indices (e.g., Haring et al., 1984; Piquart & Sörensen, 2000). These measures are deemed objective since they contain factual descriptions of life events with limited top-down psychological influences such as personality and mood. The literature on the SES and subjective well-being (SWB) link has primarily focused on these variables. The objective and

subjective measures of SES are associated, although not perfectly (Adler & Stewart, 2007; Kraus et al., 2012), with reported correlational relationships ranging from .30 to .60. There are a few reasons for their moderate correlations. First, while objective levels of income, educational attainment, and occupational prestige are frequently (or even explicitly, in the case of the ladder SES measure) referred to in making SES judgments, individuals may still differ in which criteria they consider to be most critical or relevant to their SES (Adler & Stewart, 2007).

For some, income is the most important factor in determining one's socioeconomic status, whereas for others, educational achievement is the most important factor. Second, various qualitative assessments of the same objective criteria can result in different rank judgments (Adler & Stewart, 2007). Individuals with a college degree from an elite institution, for example, are more likely than those with a college degree from a less well-funded university to place themselves higher on the SES ladder or identify as upper-class. Third, because people typically attach subjective meaning to their current objective SES, which is determined by their personal situational or broader societal context (Destin et al., 2017), subjective SES is likely to reflect this unique meaning. To put it another way, the same objective SES level might have a different meaning depending on whether a person is moving upward or downward in SES, or where they are in relation to an ideal self, social standards, or the people around them. Finally, because subjective measures are evaluative, they are sensitive to top-down influences such as transient emotions, personal opinions, and qualities unrelated to socioeconomic status. Subjective measures may become less coherent with objective indicators that are immune to these impacts as a result of this.

Despite the widespread use of SES, little attention has been paid to examining its measurement (Mueller & Parcel, 1981). The usefulness of SES as a variable in behavioural research is ultimately influenced by the reliability and validity of the particular method or

instrument used in its measurement (White, 1982). There are a variety of additional SES measurements available (e.g., Blishen et al., 1987; Entwisle & Astone, 1994; Nakao & Treas, 1992); however, the four-factor index of SES developed by Hollingshead (1975) has been one of the most widely used measures of SES (Edwards-Hewitt & Gray, 1995). In investigations of adult dyslexia (Felton et al., 1990), premature new-borns (Barratt et al., 1996), and mental disorders such as major depression, the Hollingshead measure has been used as a predictor/covariate and/or as an outcome measure (Cuffe et al., 1995; Garrison et al., 1997). However, some researchers have voiced concerns about the usage of the Hollingshead measure (Mueller & Parcel, 1981), such as the inclusion of both education and occupation in the score, the weighting technique, and the combination procedures for single and dual wage workers.

There are few statistics on the interrater reliability of SES measures, especially as many of them rely on a rater's subjective judgement (Edwards-Hewitt & Gray, 1995; see Gottfried, 1985 for an exception). When people's occupations do not immediately correlate to the job titles offered by a certain SES measure, this subjective ranking becomes apparent. Job titles may be out of date (for example, the Hollingshead occupational classifications match those from the 1970 US census), and respondents may not describe their jobs according to census titles. When comparing SES across countries and cultures, the use of subjective assessments and the lack of interrater reliability become even more relevant, as the same work may have different status in different countries. Relationships between established SES measures (e.g., Hollingshead, 1975) and more recently produced SES measures are rather poorly understood (e.g., Nakao & Treas, 1992).

It is also worth considering whether it is possible to make SES calculations easier; this could improve its popularity among researchers. Although the methods for calculating SES vary each study, many include criteria such as family income, parental education, parental

occupation, and the social prestige of the occupation (e.g., Edwards- Hewitt & Gray, 1995). If these basic characteristics are highly linked with recognised and published SES measures when used individually, the procedure of computing SES scores could be simplified. At a minimum, research on SES should include indices of income, education, and occupation (Ursache & Noble, 2016), therefore variants of these indices will be incorporated throughout this thesis, including individual annual income, education level, and occupational status.

In order to compute a total SES score, this thesis will employ similar methods of SES computation used in Truhan et al. (2022) and Kochanska et al. (2012). Household income will be assessed on a range from 1 (less than £6000) to 8 (more than £64,000), educational attainment ranges from 1 (Primary education) to 7 (Doctorate), and employment status is rated from 0 (unemployed) to 4 (full-time employment).

Methodological Approaches in Scale Development

The main aims of this thesis are to investigate the theoretical construct of successful psychopathy, establish how to best measure these traits within the general population, and to develop and validate a scale suitable for measuring these traits. For this, the thesis mainly employed a cross-sectional approach to investigate the construct of successful psychopathy, as well as its relationships to objective/subjective success, close relationships, and risk-taking behaviour. As detailed in Chapter One, this thesis examines general population data as a basis for developing a new measure of successful psychopathy and validating it in terms of its (i) construct validity, (ii) convergent and divergent validity against existing measures of psychopathic traits, and (iii) predictive validity against a multitude of outcome measures e.g., aggression, empathy, cognitive ability, political skill, and expectancy of success.

Item Generation and Expert Ratings in The Development of Psychometric Measures

According to several authors (Clark & Watson, 1995; DeVellis, 2003; Nunnally, 1967), the scale development process comprises difficult and methodical approaches that demand theoretical and methodological rigour. According to these scholars, the scale development process can be divided into the following three sections.

First, an "*item generation*" stage wherein the researcher gives theoretical support for the initial item pool using deductive, inductive, or a combination of the two methods (Zanon et al., 2016). Deductive techniques are based on a thorough review of the literature and current scales (Hinkin, 1995). Focus groups, interviews, expert panels, and qualitative exploratory research approaches are examples of inductive methods that base item generation on qualitative information about a concept obtained from the target population's viewpoints (Kapuscinski & Masters, 2010). The researcher is also interested in several parameters that govern the format of each item and the whole scale. Acceptable scale instructions, a suitable number of items, an adequate display format, and appropriate item redaction (all items should be simple, clear, explicit, ensure response variability, remain unbiased, and so on) are only a few examples (DeVellis, 2003). Therefore, the thesis adopted this strategy.

Second, a "*theoretical analysis*" stage sees the researcher investigate the content validity of the new scale to ensure that the initial item pool accurately reflects the desired construct (Arias et al., 2014). A content validity assessment is essential because inferences are made based on the final scale items. The item content must be regarded legitimate in order to offer confidence to all subsequent inferences. To establish content validity, the researcher searches out additional perspectives on the operationalised items. Expert judges (scale developers or specialists in the target construct) or target population judges (potential scale users) can provide feedback, allowing the researcher to ensure that the hypothesis established in the study appropriately represents the construct (Nunnally, 1967). Expert

judges are the most commonly used approach for assessing content validity (e.g., Uzunboylu & Ozdamli, 2011; Zheng et al., 2010). In prior analyses, expert evaluations have also been shown to be the most common qualitative technique for deleting undesired items (Kapusinski & Masters, 2010; Ladhari, 2010). In their literature analysis, Hardesty and Bearden (2004) emphasised the necessity of these experts thoroughly analysing the initial item pool. They emphasised that at the very least, any study including new, modified, or previously untested scale items be judged by a panel of specialists.

Thirdly, expert ratings have previously been utilised in psychopathy research, the most notable of these being the PCL and PCL-R (Hare, 1999/2003). The PCL-R incorporated expert ratings both in its conceptualisation and its clinical use whereby scores are acquired by expert interviews. Psychometric scales derived from the PCL construct also included expert ratings in their initial development, for example the LSRP (Levenson et al., 1995). Other psychopathy psychometric measures which incorporated the use of expert or judge ratings in the initial conceptualisation alongside deductive strategies includes the Comprehensive Assessment of Psychopathic Personality (CAPP; Sellbom et al., 2015), Elemental Psychopathy Assessment (Lynam et al., 2010), B-Scan (Babiak & Matheiu, 2016), and Five Factor Model Psychopathy Resemblance Index (PRI; Miller et al., 2001) to name a few. Typically, most non-PCL derived measures are developed using a combination of deductive reasoning and expert ratings (Burisch, 1984) in which the Cleckley (1941/88) model of psychopathy is used to develop items. However, it is worth keeping in mind the previously discussed controversies and lack of cohesion in defining what psychopathy or psychopathic traits are and how they present themselves as this could mean that experts ratings or opinions may be broad or vague (Cooke et al., 2012).

Thus, because of the potential subjectivity of these opinions there is still a lack of consistency when utilising expert ratings alone, and researchers should keep this in mind

when deciding whether or not to remove or maintain items for a scale (Morgado et al., 2017). Both Clark and Watson (1995) and Malhotra (2004) stress the need of having members of the target population evaluate the new scale prior to its implementation, which is why the use of pilot studies are recommended. These allow researchers to determine potential responses to the scale and eradicate any psychometric errors or flaws before the scale is selected for wider use. Therefore, the thesis piloted the initial theoretical construct of the scale before moving on to the next phase of scale development.

Classical Test Theory (CTT) in Personality Research

There is some degree of error in every measurement. This is true regardless of whether we are attempting to calculate the separation between two places, assessing the weight of participants during intervals, or gauging the effectiveness of treatments over time. Typically, psychometrics is concerned with the measuring of intangible characteristics or traits, like psychopathy that cannot be observed in the same manner that weight can be observed on bathroom scales or height can be directly read from a tape measure. In order to begin resolving this issue, a set of questions or “items” considered pertinent to the latent trait of interest are developed and are later scored typically using a Likert design. Participants are asked to indicate their level of agreement with an item and these responses are then compiled to generate an estimate of that individual’s self-reported levels of the latent trait.

Once the scale item pool has been developed; different psychometric strategies can be used to evaluate the items. A data reduction strategy for finding the number of factors that explain trait inter-correlations is exploratory factor-analysis. As a result, factor analysis (i) uncovers factors of correlating items, (ii) simplifies the description of behaviour by reducing the number of items to a few common factors or traits, (iii) simplifies the description of behaviour by reducing the number of items to a few common factors or traits, and (iv) simplifies the description of behaviour by reducing the number of items to a few common

factors or traits. The more variance that can be accounted for, the more confident one can be in the component influencing behaviour. Thus, the exploratory factor analytic approach has been used in this thesis to investigate the construct of successful psychopathy and develop a psychometric measure by which to examine and quantify its trait manifestation.

Nevertheless, exploratory factor analysis (EFA) has been criticised for being subjective in terms of the number of components retrieved and the rotation method used (Ford et al., 1986), which suggests that the analysis lack replicability and informed review when unsupported by more robust methods (Reio & Shuck, 2015). In any case, factor analysis alone cannot provide a conclusive answer as to which personality and structural model should be used. Strong theoretical reasoning is essential in theory and scale development, and furthermore, whilst EFA is a useful tool for creating scales, it should not be used to draw conclusions about the nature or significance of personality traits on their own (Eysenck & Eysenck, 1976), but should be used in conjunction with other methodologies such as validity testing (e.g., predictive and concurrent), and Rasch analysis which is a psychometric approach to categorizing data based on item response.

Rasch Analysis and Item Response Theory

Due to a number of advantages it offers over Classical Test Theory (CTT) approaches such as EFA and CFA, Rasch analysis can be beneficial as a robust measuring strategy when studying psychometric features of a scale during the development phase. Initially, Rasch approach can get beyond some of the constraints of CTT, such as the inability to alter the item difficulty level. CTT, for example, uses a total score calculated from all of the items; nevertheless, items may convey varying quantities of information about the construct under inquiry, and so should not be viewed as equal contributors to the overall score (Stucki et al., 1996). Individual item loadings to a construct or factor differ, implying that they contribute different values to the overall construct or latent trait under evaluation,

demonstrating CTT's shortcoming. An illustrated person-item threshold map, which is commonly displayed graphically to highlight how well the range of item problems covers the skills or attributes within a sample, can also be included in a Rasch analysis (Tennant & Conaghan, 2007). The Rasch model for dichotomous data is often considered a model of item response theory (IRT).

In comparison to CTT, it has been stated that item response theory (IRT) provides several benefits for assessing the psychometric characteristics of measures (Embretson & Reise, 2000; Steinberg & Thissen, 1996). IRT techniques, in contrast to CTT, offer a trait score for each item, reliability of each item at various levels of the underlying trait, and the psychometric properties produced are sample or group invariant.

Rasch analysis, which incorporates Differential Item Functioning (DIF), further demonstrates its advantages over CTT. When participants with the same amount of a latent trait such as successful psychopathy, but from different categories, such as male and female respond to an item in different ways, this is known as DIF. DIF is similar to invariance testing, whereby a measurement with no DIF suggests the scale is invariant and DIF means that the invariance assumption is violated. This bias can be classified as consistent or non-constant throughout a characteristic, and Rasch analysis can address consistent bias with scale adjustments, although non-consistent items are usually candidates for removal from the scale (Kersten & Kayes, 2011). Rasch also allows for precise measurements of individuals at all levels of the scale, including extremes (Hobart & Cano, 2009), which is very useful for a construct like successful psychopathy, where the researchers are focused on the extreme levels of psychopathic traits.

Rasch analysis investigates several parameters, including local independence assumptions, item bias, unidimensionality, and the proper sequencing of item and response possibilities (Kersten & Kayes, 2011). When the Rasch model fits, these parameters satisfy

the model conditions, and the participants are ordered according to their level of ability when responding to a scale measuring a latent trait (e.g., successful psychopathy), and the items are then classified according to the level of difficulty assessed by each item.

Rasch analysis begins by examining the overall fit of the data to the Rasch model, followed by a screening of individual items and a determination of residual correlations between items that may affect the overall model fit owing to local dependency or DIF. Non-significant item-trait interaction as calculated by chi square ($p > .05$); individual item fit residuals between -2.50 and +2.5; residual correlations between items (.20; Christensen et al., 2013); and no Differential item functioning (DIF) due to demographic factors, for example age and sex, are among the overall Rasch model criteria. Rasch analysis uses the person separation index (PSI) to assess reliability. This determines the scale's capacity to distinguish between people with varying characteristic levels of a trait, for example successful psychopathy. For group assessments, a PSI of $> .70$ is regarded appropriate, while for individual assessments, a PSI of $> .80$ is considered acceptable (Fisher, 1992).

Rasch analysis necessitates an iterative approach of tweaking and analysing psychometric features in order to attain the optimal model fit. To attain a reasonable model fit, previous Rasch research tended to omit misfitting items, which could affect a scale's construct validity. As a result, a novel strategy was used to create super-items by integrating locally dependent items into a single item (super-item), which reduces measurement error and improves fit to the Rasch model (Lundgren-Nilsson et al., 2013; Medvedev et al., 2018).

Using principal component analysis (PCA) of the residuals and t -tests, the Rasch approach assesses the measure's unidimensionality (Smith Jr., 2002). Unidimensionality needs less than 5% of significant t -tests when comparing person estimates for the set of items with high loadings and the set of items with low loadings on the initial principal component of residuals. Unidimensionality is also confirmed if the lower bound of the confidence

interval determined for the number of relevant *t*-tests overlaps 5%. When the Rasch model's conditions are met, the distribution of person-item thresholds is examined to determine how well the scale's item thresholds cover the trait levels in the sample. Finally, using Rasch model estimates, an ordinal-to-interval transformation table can be developed, allowing for the conversion of ordinal scale scores into interval level data to improve assessment accuracy. Thus, this thesis applied both CTT and Rasch statistical analyses to develop the scale.

Generalisability Theory (G-Theory)

Generalisability Theory (G-Theory) is an analytical technique for data obtained through quantitative measures (e.g., rating scales, performance tests). It is known as G-Theory because it estimates the extent to which the influence of any specific source of error variance can be generalised to all possible situations and contexts, rather than just the specific testing situation for which data were obtained (Cronbach et al., 1963). G-Theory evaluates various sources of variation that contribute to measurement error associated with the main variable of interest (Allal & Cardinet, 1976). It is an extension of classical test theory (CTT) based on the idea that every score is made up of both true and error variance, but it goes beyond CTT's limited assumption of treating error variance as a single factor (Allen & Yen, 1979).

Individual (e.g., personality), methodological (e.g., psychometric characteristics of the measure used), and situational (e.g., time) factors may independently contribute to measurement error in naturally occurring environments. G-Theory provides an advanced method for assessing these factors, commonly known as "facets," and their interactions, thereby contributing to the improvement of methodology and the precision of an assessment instrument. G-Theory employs repeated-measures factorial analysis of variance (ANOVA) to estimate the relative contribution of various sources of variability to overall measurement error, also known as "noise" (Brennan, 2001). Every such contribution, like other reliability

coefficients, can be expressed as an intra-class correlation coefficient (ICC) ranging from 0 to 1.

The primary goal of generalisability analysis (G-analysis) is to calculate relative and absolute G-coefficients for the object of measurement and to estimate the contribution of each facet to the variance of universe scores, including relative and absolute error variance (e.g., persons). Only variance directly influencing a relative measurement tool (e.g., person-occasion and person-item interactions) is accounted for by the relative G-coefficient (Gardinet et al., 2009; Shavelson et al., 1989b): The absolute G-coefficient (G_{absolute}) accounts for absolute error variance (which includes other factors influencing an absolute measure, such as items and events) (Gardinet et al., 2009). The relative or absolute G coefficient should be considered depending on the study's focus. A relative G-coefficient, for example, is useful in comparing measurement designs, whereas an absolute G-coefficient should be considered if measurement is criterion referenced. G-analysis computes and displays variance components and G-coefficients in both relative and absolute terms.

In the Generalisability Study (G-study) design, absolute estimates account for all possible error variances assuming that all samples are drawn from infinite populations defined as populations including all possible elements, whereas relative estimates account for specific or finite populations (e.g., scale items). In other words, if all populations are assumed to be drawn from an infinite population, the absolute and relative variance estimates, as well as the G coefficients, will have the same values.

Traditionally, studies of state and trait variability have been limited to structural equation modelling (SEM) approaches (Geiser et al., 2015; Hamaker et al., 2007; Steyer et al., 1992). However, none of the proposed SEM methods account for all the different sources of variance (e.g., items) that contribute to the measurement error associated with state and trait variability, limiting their applicability for state and trait measure validation. Such

variations in variability necessitate a more in-depth examination of how facets or components that can affect state and trait, such as person and situation, can be quantified. Changes in state and trait can thus be predicted by understanding changes in person and situation, resulting in true generalisability. G-Theory can be used to identify and compare the amount of variance explained uniquely by the person, the items, and the occasion, as well as their interactions (Bloch & Norman, 2012; Brennan, 2001). Person-occasion interaction variance is a direct reflection of a latent construct's "stateness," whereas person variance alone is more representative of its "traitness" (Buss, 1989; Chaplin et al., 1988; Epstein, 1984). Importantly, G-Theory allows for this analysis to be performed on the total test, any subscales, and even individual items. In other words, true "state items" can be distinguished from non-occasionally sensitive items. A G-study involves the estimation of variance associated with the object of measurement (e.g., people) and influencing factors (e.g., events). The variance components are estimated using observed values from the universe of all possible (hypothetical) observations. Within this thesis, G-Theory will be employed to examine the reliability and generalisability of the psychometric scale of successful psychopathy. Since this approach is still very under-utilized in scale development research, with the preference being for simpler less robust SEM modelling (Medvedev, 2022), this will add a novel contribution to the thesis, as well as ensuring the parametric assumptions are as robust as possible (Suen & Lee, 2007).

The Experimental Approach

Whilst the thesis uses mainly a cross-sectional approach, it must be considered that cross-sectional designs, whilst useful, cannot identify cause and effect relationships and are limited to their directional and predictive abilities (Costa & McCrae, 1986; Spector, 2019). Thus, in addition to cross-sectional data, longitudinal and experimental data are also useful to develop understanding and knowledge specifically when it comes to scale development (e.g.,

Brinkley et al., 2001; Wissenburg et al., 2022). Therefore, the thesis extends its cross-sectional approach to a behavioural task in order to explore the experimental application of the scale. This next section will give an overview of the experimental approach used in this research to examine the facet of risk-taking in successful psychopathy.

Iowa Gambling Task

Neuropsychological research conducted with forensic populations has indicated that those high in psychopathic traits do not have executive dysfunction associated with frontal lobe defects (Hart et al., 1990), this is refuted however by a more recent meta-analysis (Olgive et al., 2011), and evidence indicating deficits associated with the prefrontal cortex, specifically the orbitofrontal cortex (OFC), which is associated with cognitive processing and inhibitory response (Blair et al., 2006a; LaPierre et al., 1995). Accumulated evidence from several lesion studies has demonstrated that damage to the prefrontal cortex has been associated with deficits in decision making and impulse control (Anderson et al., 2006; Bechara et al., 2000; Bechara & Van Der Linden, 2005; Berlin et al., 2004). The Iowa Gambling Task (IGT; Bechara et al., 1994; 2007) is the most commonly used task to assess experimentally decision-making mechanisms in pathological situations (Bechara et al., 2005). Because it is linked to performance on other executive function tasks, it is regarded a test of PFC functioning - it is seldom failed by healthy participants and accounts for punishment-reward processing (Balconi et al., 2014; Poletti, et al., 2011).

The IGT (Bechara et al., 1994) was created as a test of the somatic marker hypothesis and incorporates probabilistic learning utilising knowledge about (monetary) rewards and punishments. Two "risky decks" with large rewards and even higher punishment magnitudes are provided to participants, and the other two are "non-risky decks" with lower reward and punishment magnitudes. Participants are given four decks of cards total

. When given the assignment, players frequently fail to recognise the most beneficial decks in the first choices, resulting in picks that are close to the probability level. However, as the game progresses, they tend to select cards from the favourable decks more frequently. Experimenters frequently analyse four to five blocks of 25–20 trials individually to record such a change in behaviour. Many authors instead focused on the task's later blocks, dividing the IGT into two categories: decision under ambiguity (in which the participant has little knowledge of the reward/punishment ratio of each deck) and decision under risk (in which the participant's knowledge of the advantageous/disadvantageous features of the decks becomes clear (Brand et al., 2007a; 2007b; Buelow et al., 2014). To complete the activity successfully, decision-making abilities, mental flexibility, impulse control, reversal learning, and reward/punishment sensitivity are required (Fellows & Farah, 2005; Mimura et al., 2006; Salvatore et al., 2021).

Indeed, existing evidence suggests that individuals with high psychopathic traits perform poorly on the IGT as it is specifically sensitive to OFC-associated dysfunction or deficits (Bechara et al., 1994). This region of the brain is engaged in cognitive processes, particularly the crucial decision-making process. It has been postulated that the OFC could be engaged in behaviour planning involving reward and punishment, emotions, social behaviour, and rule learning (Zald & Kim, 1996), making it pivotal to success on the IGT. However, some studies conducted using the PCL-R found no differences between 'psychopaths' and 'non-psychopaths', although this could be due to scores being below the cut off (Lösel & Schmucker, 2004) and the use of non-standardised rewards (Schmitt et al., 1999). Overall, previous research on the relationship between psychopathy and IGT performance, has been mixed; with some studies demonstrating poor IGT performance by high psychopathic groups (Blair et al., 2001; Mahmut et al., 2008; Mitchell et al., 2002; Morgan et al., 2011; van Honk et al., 2002), and others failing to support this (Blair & Cipolotti, 2000; Lösel & Schmucker,

2004; Schmitt et al., 1999), which again could be a result of measurement variance, non-standardised rewards, and measuring psychopathy as a discrete class.

The somatic marker hypothesis states that individuals with high psychopathic traits are unable to produce anticipatory warning signs for harmful situations or decisions. Despite the fact that research results are generally contradictory (see above), the majority of studies seem to imply that psychopathy has a detrimental effect on task performance in risk-taking paradigms. In the IGT, psychopathy and decreased learning may be related, but attention may attenuate this relationship.

Moreover, these mixed findings between psychopathy and risky decision-making could be explained by trait impulsivity. Subjectively, impulsivity appears to play a part in psychopathic persons' risky IGT performance, in which examinees appear unable to control their desire for huge reward decks despite the knowledge that these decks also generate even larger losses. Impulsivity has also been suggested as a factor in psychopathic inability to resist gratification and learn from previous experiences (Newman et al., 1992). Similarly, most tests for secondary psychopathy include questions about impulsive, rash behaviour (e.g., Levenson et al., 1995, Lilienfeld & Andrews, 1996). Some studies have found a link between impulsivity or impulsive diagnoses and risky selections (Bazanis et al., 2002, Dolan et al., 2008, Jollant et al., 2005), whereas others have not found any significant links between impulsivity and IGT performance in non-psychopathic subjects (Overman et al., 2004; Perales et al., 2009). This raises the question of whether impulsivity, alone or in combination with psychopathic traits, is linked to IGT performance in otherwise healthy controls.

Finally, despite inconsistencies with previous studies on psychopathy and decision-making, most studies support the indication that traits associated with erratic lifestyle and instability are more negatively associated with poor decision-making under the IGT paradigm when compared against affective and interpersonal traits (Glimmerveen et al., 2021). This

highlights the IGT as an ideal task for the purposes of this thesis due to the successful psychopathy subtype being structured primarily around the affective and interpersonal traits associated with psychopathy, and a lack of previous research surrounding the role of impulsivity in unique psychopathy constructs.

In summary, the IGT is a well-known and verified instrument for assessing one's capacity for making decisions, particularly with regard to reward processing and taking risks (Rocha et al., 2011). The IGT is very useful for those who exhibit high levels of psychopathic tendencies for a number of reasons. To begin with, because of its application to real-world situations, it may replicate situations where impulsive and dangerous behaviours—often displayed by individuals with psychopathic traits—are made. Furthermore, the IGT emphasises emotion-based decision-making, which is important to comprehend the differences in emotional processing that exist in people who have psychopathic tendencies (see Turnbull et al., 2014). The task's sensitivity to learning and adaptability is in line with the difficulties that psychopathy presents in helping people learn from their mistakes and change their conduct (Glimmerveen, 2021).

Moreover, the IGT reflects the sensation-seeking and impulsive characteristics of psychopathy, forcing individuals to weigh short-term benefits against long-term drawbacks. Lastly, a novel way to investigate the neural foundations of decision-making deficits in people with high psychopathic traits is through the IGT's association with certain neurobiological circuits, specifically the ventromedial prefrontal cortex.

In conclusion, the Iowa Gambling Task is a good option for evaluating decision-making in people who exhibit high levels of psychopathic traits. It offers insightful information about their deficiencies due to its practical application, emphasis on emotion-based decision-making, sensitivity to learning and adaptation, ability to capture impulsivity and sensation-seeking, and link to underlying neurobiological processes.

Summary

In summary, the last sections have discussed the existing psychometric measures of the psychopathic personality and argued why they cannot be an accurate measurement tool for the subtype successful psychopathy. Moreover, the various statistical methods which will be incorporated to develop and validate a psychometrically robust measure of successful psychopathy has been discussed, alongside details of the behavioural pilot which will provide support for the applicability of the scale to real-world decision making. The next chapter will advance on the literature review presented within Chapter One, by further developing the theoretical construct of successful psychopathy using systematic review techniques.

Chapter 3. A Systematic Review on the Current Conceptualisation of Successful Psychopathy

Whilst previous chapters introduced the initial theoretical understandings of the successful psychopathy construct and the upcoming methodology being implemented within this thesis; this chapter builds a more systematically-sound understanding of successful psychopathy and explores the facets considered to be central to its design as a psychopathy sub-type. This chapter also takes the opportunity to address the previously introduced models of successful psychopathy and discuss their value and contribution to the literature and future empirical research. Please note, this section of the thesis has been published and is only adapted here in terms of consolidated wording and ensuring citations appear in APA 7th edition format.

Wallace, L., Fido, D., Sumich, A. L., & Heym, N. (2022). A systematic review on the current conceptualisations of successful psychopathy. *Forensic Science International: Mind and Law*, 100076. <https://doi.org/10.1016/j.fsimpl.2022.100076>

Introduction

Psychopathy is a disorder characterised in part by callousness, a diminished capacity for remorse, superficial charm, impulsivity, and poor behavioural controls (Hare, 1991), and is associated with increased levels of antisocial behaviour and violence (Hare & Neumann, 2005). These individuals have a propensity for being detained either forensically or clinically and are estimated to make up around 1% of the general population (Hare, 1999). Dickmans (1990) suggested that people with psychopathy traits frequently demonstrate dysfunctional impulsivity, which describes the tendency to act with less forethought than most individuals of equal ability and could largely be described as leading unsuccessful or below average lives. Of note, the conceptualisations of psychopathy vary within the literature, this ranges

from superordinate structures (“psychopathy”) to individual facets, including affective and interpersonal (primary) and lifestyle and antisocial (secondary), to operationalised constructs (“Boldness, Meanness, Disinhibition”).

The antithesis of the prototypical psychopath would be individuals who are able to use such traits advantageously, adapting to society and gaining status and resources whilst exerting minimal effort for maximum output (Babiak & Hare, 2006). This lends credence to the idea that psychopathic traits can be adaptive and therefore, could potentially be successful traits to hold. Indeed, early clinical conceptualisations of psychopathy include adaptive aspects, such as social potency (Cleckley, 1941). However, early measures of psychopathy (Psychopathy Checklist Revised; PCL-*R*/Self-Report Psychopathy; SRP) did not account for Cleckley’s original positive adjustment traits, such as low anxiety and stress immunity, therefore previous research using these measures may have missed key information regarding the psychopathic personality and its application to successful behaviours.

In recent years, there has been increased interest in the field of so-called successful psychopathy. Such individuals are typically considered to encompass the core psychopathic traits of superficial charm, manipulative interpersonal tactics, callous-unemotional affect, reduced anxiety, and a lack of empathy, guilt, and remorse (Cale & Lilienfeld, 2002; McCord & McCord, 1964), whilst continuing to function in society, with some said to have superior functioning that can foster success (Lilienfeld, 2015). Others have claimed the successful psychopath construct is merely a demonstration of those who have been able to “fly under the radar” and evade capture for their deviant behaviours (Widom, 1977). Indeed, due to the pathological nature of the core traits, many consider the idea of a successful psychopath to be an oxymoron (Kiehl & Lushing, 2014), raising the critical question as to whether successful psychopathy exists, and if so, how it can be more concretely conceptualised in the literature. All in all, there is currently a lack of clear understanding around the conceptualisation of

successful psychopathy. Moreover, the ambiguous parameters in defining success make identifying a clear construct complex and uncertain, whereby some researchers emphasise the short-term success or long-term success, others focus on attainment, such as material gains, whilst others focus solely on the absence of antisocial behaviours (Lilienfeld et al., 2015).

Consequently, this review aims to explore the relationship between self-reported psychopathy and success more systematically in order to establish a unified framework to our understanding of the construct, and a better understanding of how success is currently defined within the literature. It examines how psychopathic traits may manifest in unconventional ways (behaviour and attitudes) and discusses implications for risk and outcome measurement. Finally, it considers the differentiation between the strategic/adaptive use of psychopathic traits and pathological consequences (Murphy & Stich, 2000).

Models of Successful Psychopathy

The conceptualisation of successful psychopathy has been limited in its depth and understanding, with several conflicting ideologies surrounding its construct. In order to address this, Lilienfeld et al. (2015) developed three models to explain these manifestations of successful psychopathy, namely, the Differential-severity (DS), Differential-configuration (DC), and Moderated-expression (ME) models. The common assumption for these is that whilst some individuals are being drawn to the maladaptive and pathological nature of their personality, others can be explained as being able to apply their traits to more adaptable behaviours, enabling them to function and appear well-adjusted in society.

The Differential-severity model postulates that psychopathy is a unitary construct, whereby those who exhibit psychopathy-related traits differ only in the intensity of their manifestation. This model implies that a *successful psychopath* encapsulates all of the traits associated with psychopathy, but to a lesser intensity, having lower levels of callousness and manipulative tendencies and displaying fewer instances of reckless impulsive behaviours.

This attenuation would allow them to be “successful” in comparison to their higher-intensity counterparts, as they would be better equipped to fit into society, thus, passing undetected by any forensic or clinical body. However, this model’s main limitation lies in its simplistic view of the construct and success as a concept, whereby success is defined only by the absence of negative outcomes (e.g., incarceration). As the model only accounts for average functioning within society, it fails to address any potential for superior functioning, and so, may not be a complete account of successful psychopathy.

The Differential-configuration model posits that the constellation of traits exhibited by those with psychopathic tendencies may differ in successful psychopaths, altering the behavioural outcomes. Mullins-Sweatt et al. (2010) suggested that successful psychopaths share some trait similarities with the prototypical psychopathic individual, however, demonstrate additional traits such as conscientiousness, self-discipline, and low levels of agreeableness, which decrease the likelihood of negative outcomes and can assist in societal adaptation. Despite this model demonstrating the potential for successful outcomes, it suggests that the differences between successful and unsuccessful psychopaths lies solely in the levels of conscientiousness. The simplistic nature of this model makes it a less desirable explanation to adequately conceptualise successful psychopathy.

The foundation of the Moderated-expression model emphasises the link between the core psychopathic traits and external moderating factors. The lack of antisocial behaviour and deviant conduct is a result of employing additional external protecting factors such as resilience (Cleckley, 1976), intact executive functioning and higher autonomic responsivity (Ishikawa, 2001), and positive childhood experiences such as good attachment and parental upbringing within a family unit (Frick & White, 2008; Waller et al., 2013). Some debate that higher levels of intelligence may also reduce the risk of deviant behaviours exhibited by those with psychopathic traits (Wall et al., 2013). These external variables may allow an individual

to channel their psychopathic traits into more socially adept situations and reduce the propensity to engage in antisocial behaviours. The Moderated-expression model appears stronger than the previous two, due to its allowance for interaction between psychopathic traits and external variables, as well as maintaining the core psychopathic traits within its conceptualisation, however, it is not clear whether this model encapsulates the entire construct.

Finally, it can be argued that the most concrete demonstration of successful psychopathy might involve a combination of the proposed models, allowing for decreased trait intensity, collaboration between the core psychopathic traits and moderating aspects, and the existence of protective external factors.

Rationale, Aims and Objectives

This review presents a systematic investigation into the current research around successful psychopathy to allow for a better understanding of the conceptualisation of the construct as indicated by the wider literature, and the evaluation of the proposed models. As such, current objectives are to (i) examine the present conceptualisation of successful psychopathy in research, (ii) explore the applicability of the successful psychopathy models, and (iii) identify the core traits associated with the successful psychopathy construct. This review differs from previous work conducted on psychopathy, as it is the first to solely focus on successful psychopathy, whilst adhering to a systematic review methodology.

Method

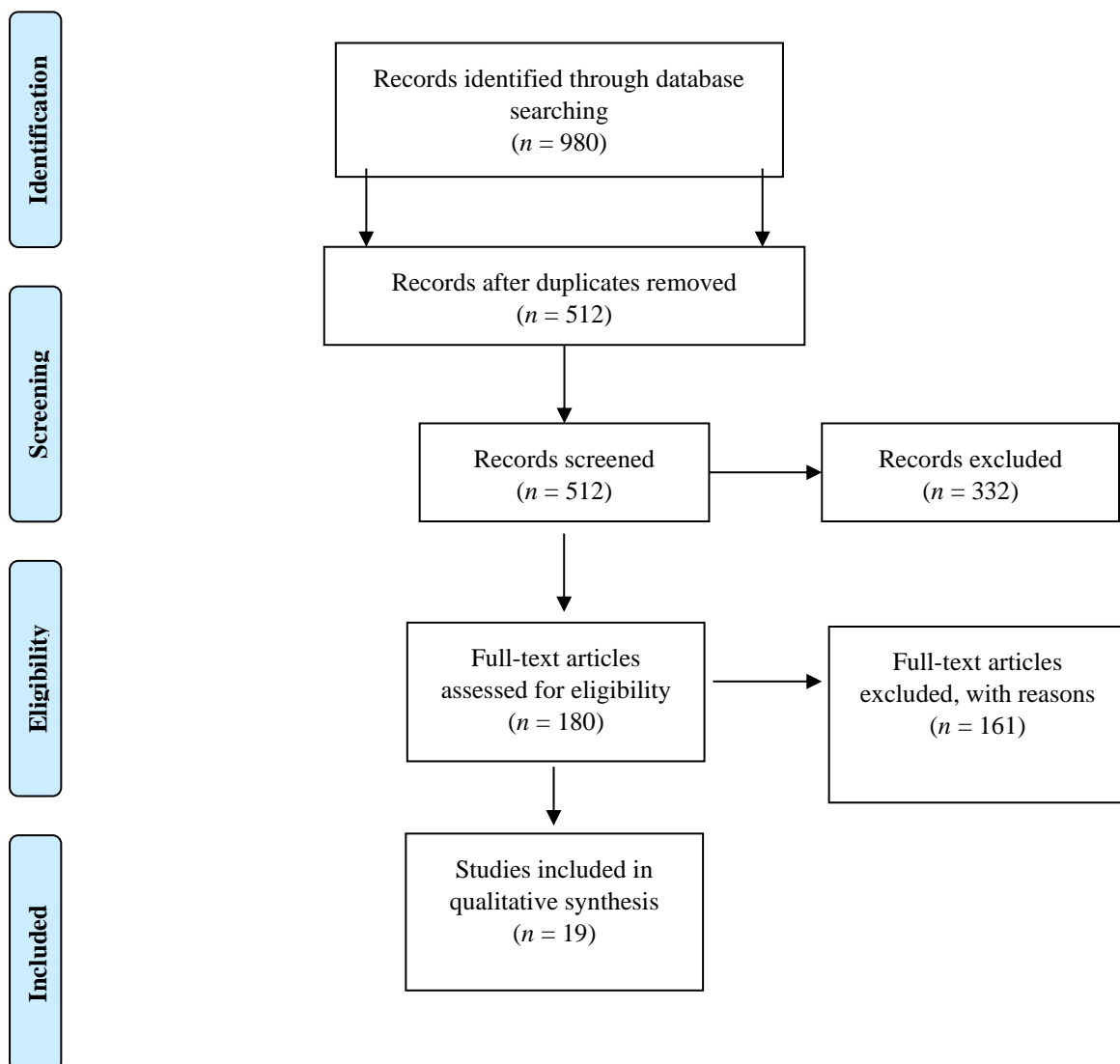
Search Strategy

The PRISMA guidelines (Moher et al., 2010) were followed to undertake this review. In total, 980 papers were identified as being relevant to the aims of this review. Of these papers, 468 were removed as they were duplicates, 449 were removed as they did not meet the

criteria for the review (see section 2.2), and the final papers included were $n = 19$ (see Figure 1).

Figure 3.1

PRISMA flow diagram (Based on Moher et al., 2009).



Inclusion and Exclusion Criteria

Population

Adults within the general population. Any studies that included participants under the age of 18 were excluded. Studies using only forensic populations (i.e., those incarcerated after committing criminal acts) were excluded.

Outcome measurement

“Psychopathy” or “psychopathic traits” as measured by a recognised psychometric measure of psychopathy or measurement, which identifies psychopathic traits within specific populations (e.g., corporate settings).

Studies using the PCL-R (Hare; 1985) as a psychometric measure were excluded, as they are most widely used in forensic samples, which does not fit the nature of this review due to the classification of criminal conduct as a defining feature rather than an outcome. Additionally, this review is focused on self-report psychopathy within general populations samples, therefore the PCL-R is unsuitable for this review. The authors instead used downward extension measurements (i.e., SRP-III and LSRP).

Measures which include psychopathy as part of a broader assessment or a separate construct within a longer measure, such as the dark triad (DT; Short Dark Triad; SD3, The Dirty Dozen), were excluded to avoid any potential cross-over between the accompanying constructs, and DT measurements typically contain a smaller number of items, and do not address all sub-factors associated with psychopathy. Additionally, due to the volume of research conducted using DT measurements, this would require a review of its own.

Included papers must also demonstrate empirical evidence of psychopathy and individual success (e.g., academic achievement or performance), such as to show the relationship between

psychopathy and at least one outcome behaviour or the relationship between psychopathy and a relevant variable.

Study characteristics

Studies selected were predominantly primary research and had cross-sectional designs. The selected studies also included a meta-analysis.

Report characteristics

Papers included were all published after 1985 to ensure data is provided after the formalisation of psychopathy assessment; must be available in English; restricted to published studies.

Verification of eligibility criteria

Information sources

Electronic Bibliographic Databases Search date: 12th August 2019.

Databases searched: Scopus, PsychInfo, PsychArticles, and ProQuest Central.

Search terms

The following search terms were used in all searches: 12th August 2019.

- Psychopath* (to include 'psychopathy' OR 'psychopathic' OR 'psychopath' OR 'psychopaths'; (in title & abstract) AND
- 'success*' OR 'adapt*' OR 'function*' OR 'corporate' OR 'leadership' (in title & abstract)

The exact syntax/strategy used were modified to the requirements of the search location.

Study selection

References were compared against the inclusion/exclusion criteria, and those that did not meet the criteria were removed. In addition, a meta-analysis on psychopathy and leadership (Landay et al., 2019) was removed from the final stage as it did not meet the study characteristics criteria. However, on closer examination, three papers from the meta-analysis were reviewed in full by both reviewers (Baird, 2002; Costello et al., 2018; Lilienfeld et al., 2014) and were added to the current final selection.

Data Collection and Quality Assessment

To aid in synthesising the data from the selected studies, a data extraction table (see Table 3.1.) was created. This table included publication characteristics of the papers (e.g., author, year of publication, country of origin), sample characteristics (e.g., age, sex), the measure of psychopathy used, main findings of the studies, limitations, and their quality assessment score.

We used the AXIS tool to assess the quality of all the selected studies within the review (Downes et al., 2016). The tool consists of a 20-item checklist designed for assessments of cross-sectional and observational research. The checklist requires either yes, no, or do not know (for calculations yes = 1, no/do not know = 0), and a score out of 20 is then generated (note that interpretation is considered subjective, therefore a second rater checked 20% of the papers included, from which the quality scores were identical following review). For the purpose of the review, scores are divided into three groups, low quality (0-7), medium quality (8-14), and high quality (15-20). The quality score of each included article can be found in Table 1 alongside the additional study data.

Data Synthesis

A qualitative data synthesis was chosen. The potential for a quantitative data synthesis was excluded due to i) the diverse nature of general population samples, ii) differences in

chosen assessment measures, iii) differences in study design, and iv) differences in the data reported.

Table 3.1. Summary of findings of successful psychopathy within general population samples

<i>Author (Year)</i>	<i>Article title</i>	<i>Country</i>	<i>N</i>	<i>Sample characteristics: Age: M (SD), Gender distribution</i>	<i>Measure of psychopathy</i>	<i>Main findings</i>	<i>Limitations</i>	<i>Quality Assessment</i>
Baird (2002)	The links between primary and secondary psychopathy and social adaptation	USA	92	Males (N = 42) Females (N = 50) M = 20 (SD = 1.21)	LSRP	Primary psychopathy does not cause deficits in social functioning - but does not offer benefits either. Secondary psychopathy is related to lack of success in social functioning.	Lack of generalisable results. Measures used need further reliability and validity testing.	High
Boddy (2014)	Corporate psychopaths, conflict, employee affective well-being and counterproductive work behaviour	U.K	304	Males (N = 162) Females (N = 142) (19.4 % were 21–30; 31.3 % were aged 31–40; 20.4 % aged 41–50 and 21.1 % aged 51–60 with the remaining 7.9 being 61 and over	PM-MRV	Compared to normal managers, dysfunctional managers and corporate psychopaths were observed to display a higher frequency of purposefully wasting employer's materials or supplies, damaging equipment or property, working slowly when things needed to be done, failing to follow instructions, and getting into arguments. They were also observed to be yelled at more, be the subject of rudeness, and work in environment where unfavourable treatment was witnessed. Corporate	Medium sized sample, only representative of one population (United Kingdom) Self-report bias. No claims towards statistical ability.	High

						psychopaths impact conflict, bullying, and employee wellbeing, which influences counterproductive workplace behaviour.		
Costello et al. (2018)	Psychopathy and pride: fearlessness and antisocial/prosocial behaviour	USA	339	Males (N = 143) Females (N = 196) M = 38.6 (SD = 11.4)	PPI-R	Fearless dominance (FD) positively correlated with both types of pride. Self-centered impulsivity positively associated with hubristic pride and negatively associated with authentic pride. Authentic pride moderated relationship between FD and transformational leadership. Authentic pride or positive parenting did not moderate any relationship between FD and prosocial/antisocial behaviour. Hubristic pride moderated the relationship between impulsive-antisocial features and antisocial behaviour in a protective manner.	Self-report, retrospective accounts, validity of pride measure is questionable. Reliance on Mturk sample.	High
Dalkner et al. (2015)	Psychopathic personality factor "Fearless dominance" is related to low self-reported stress-levels, fewer psychiatric symptoms and more adaptive stress coping	Austria	628	Males (N = 279) Females (N = 347) M = 52.9 (SD = 7.7)	PPI-R (German version)	Psychopathic FD traits were negatively associated with stress and positively associated with adaptive coping methods. Stress immunity and social potency were positively related to adaptive stress coping.	Cross-sectional research (longitudinal needed) self-report bias, medications not monitored, sample showed below	High

	in psychiatric disorders					Psychopathic traits could be considered a buffer function in the development of depression.	average psychopathy levels.	
Eisenbarth et al. (2018)	Do psychopathic traits predict professional success?	U. K	439	Males (N = 177) Females (N = 262) M = 33.00 (SD = 9.22)	PPI-R (Short version)	Fearless dominance (FD) positively associated with professional success & material success; Self-centered impulsivity (SCI) negatively associated. Extraversion predicted material success. SCI and extraversion predicted professional satisfaction. When Big5 added FD no longer associated with material success.	Relevance of different components of psychopathy in regard to material and professional success, self-report bias, noisy data from online platform.	High
Gordon et al. (2004)	Functional differences among those high and low on a trait measure of psychopathy	USA	20	Males (N = 20) M = 23.5 (SD = 4.1)	PPI	No significant behavioural differences were found. Those high PPI demonstrate a different pattern of neural activity when responding to tasks that require affective processing.	All male sample, self-report bias, study design does not allow examination of specific categories to facial affect.	High
Hassall et al. (2015)	Psychopathic traits of business and psychology students and their relationship to academic success	U. K	263	Males (N = 104) Females (N = 158) M = 21.66 (SD = 3.61)	SRP- III	Greater levels of psychopathic traits in business students than psychology students. Antisocial behaviour and gender (male) negatively correlated to grade outcome.	Results cannot be generalised due to sample population. Response bias.	High
Hill, & Scott, (2019)	Climbing the corporate ladder: desired leadership	Canada	25	N/A	PPD-PRCL	25 adverts were screened for psychopathic traits.	Sample size is minimal. Sample bias.	Medium

	skills and successful psychopaths							
Howe et al. (2014)	The Relationship among psychopathy, emotional intelligence, and professional success in finance	USA	55	Males (N = 39) Females (N = 16) M = 37.87 (SD = 12.40)	PPI-R	Corporations are seeking out applicants with traits synonymous with F1 Psychopathy. Finance employees showed higher levels of interpersonal-affective psychopathic traits than other community samples. Interpersonal affective traits were related to higher annual income and higher corporate ranks. Impulsive-behavioural traits were negatively related to emotional intelligence. Results showed a weak but significant relationship between the affective-interpersonal (Fearless dominance) traits in psychopathy and professional success.	Small, biased sample, self-report bias, issues with how pro success measured, how psychopathy is conceptualised.	High
Lantrip et al. (2016)	Psychopathy traits are associated with self-report rating of executive functions in the everyday life of healthy adults	USA	524	Males (N = 257) Females (N = 267) M = 23.07 (SD = 2.91)	PPI	Antisocial impulsivity (AI) and fearless dominance (FD) were associated with worse inhibitory control. AI was also associated with worse ability in monitoring the effect of one's behaviour on another. FD was associated with better emotional control and cognitive flexibility. Psychopathic traits are associated with subjective	Non-clinical sample. Data collected before PPI-R was usable - therefore the study would need replication. Correlational research.	High

							ratings of executive functioning (EF) in everyday life.		
Lilienfeld et al. (2012)	Fearless dominance and the U.S. presidency: implications of psychopathic personality traits for successful and unsuccessful political leadership	USA	N/A	N/A	FFM-derived prototypes of PCL-R	121 expert raters reviewed 42 US presidents and their leadership skills. Fearless dominance (FD) associated with better presidential performance (leadership, persuasiveness, and crisis management) as well as initiating new projects and being a world figure. Impulsive anti-sociality was not associated with rated presidential performance, indicating negative job performance.	Psychopathy traits weren't measured exactly, only estimated from FFM facets. Results cannot be generalised to other positions of power. Personality and performance can be influenced by luck.	High	
Lilienfeld et al. (2014)	Correlates of psychopathic personality traits in everyday life	Worldwide	3388	Males (N = 1657) Females (N = 1731) M= N/A	PPI-R SF	Psychopathic traits (Fearless dominance) positively associated with leadership/management positions and high-risk occupations. Positively associated with political conservatism, lack of belief in god.	Cross sectional research, self-report, external validity limitations.	High	
Međedović et al.(2018)	Can psychopathic traits be adaptive? sex differences in relations between	Croatia	650	Males (N = 260) Females (N = 388)	SRP-III	Affective psychopathic traits have adaptive potential and present a protective factor for emotional distress. Lifestyle and	Self-report bias, no inclusion of environmental	High	

	psychopathy and emotional distress			M = 21.73 (SD = 1.94)		antisocial traits represent risk factors for emotional distress. Adaptive traits seem to be more prominent in males than females.	factors, student only sample.	
Osumi & Ohira (2017)	Selective fair behaviour as a function of psychopathic traits in a subclinical population.	Japan	349	Males (N = 228) Females (N = 121) M = 18.63 (SD = 1.28)	LSRP (In Japanese)	Dictator game (DG) and Ultimatum game (UG). Compared with their offers in the DG, individuals with higher scores for primary psychopathy made larger offers in the UG, where low offers could trigger punishment from the recipient. Primary psychopathy did not decrease the amounts of offers in either game when the participant considered the recipient to be a friend. Secondary psychopathy was not associated with differences in behavioural fairness depending on a potential for punishment or social distance. Gender impacted the game but not psychopathic traits.	Hypothetical situations cannot be accurately applied to real-world scenarios. No control for demographic factors (socioeconomic, intelligence).	High
Pasion et al. (2018)	Dissociable effects of psychopathic traits on executive functioning: Insights	Europe	104	Males (N = 39) Females (N = 56) M = 32.0 (SD = 11.6)	TriPM	Positive association between boldness and inhibition. Meanness accounted for lack of inhibitory control. Disinhibition explains updating dysfunction.	Self-report bias, no cross information, used total psychopathy scores, cross sectional	High

							from the triarchic model.		research. Split-sample, difficulty in extracting non-forensic results.
Persson & Lilienfeld (2019)	Social status as one key indicator of successful psychopathy: An initial empirical investigation.	USA	591	Males (N = 241) Females (N = 350) M = 39.57 (SD = 12.28)	TriPM	Adaptive features of psychopathy (i.e., boldness) were positively related to high socioeconomic status (SES) and personality functioning. Maladaptive psychopathy features dis-inhibition and meanness were negatively related to personality functioning, and disinhibition was negatively related to SES. Conceptualisation of success as a continuous variable.		Non-violent psychopathy needs to be investigated. High intelligence could be a moderator of success but not central to causing success. Psychopathic individual may not accurately report SES. Use of an MTurk sample.	High
Spencer & Byrne (2016)	Relationship between the extent of psychopathic features among corporate managers and subsequent employee job satisfaction.	Australia	204	Males (N = 105) Females (N = 99) (age range between 18-69)	PM-MRV, LSRP	Greater levels of primary psychopathy (PP) observed within senior-level managers compared to the other corporate designations. Senior-level managers valued homogeneity in their subordinates' personality and behaviour, identified by high conformance and dependability. Role of PP in sub-ordinate job satisfaction was unclear.		Only half the organisational sample agreed to take part indicating a certain personality type. Sample not representative. Gender bias.	High

Westerlaken & Woods (2013)	The relationship between psychopathy and the full range leadership model.	Australia	115	Males (N = 42) Females (N = 73)	SRP- III	Psychopathy positively correlated with passive leadership, negatively with individual consideration.	Self-report bias, single method data collection.	High
Young-Lundquist et al. (2012)	Are self-report measures of adaptive functioning appropriate for those high in psychopathic traits?	USA	107	Males (N = 107) M = 35.98 (SD =12.25)	PPI-R	Fearless dominance (FD) positively correlated with adaptive behaviours. Self-centered impulsivity (SCI) and cold heartedness (C) negatively correlated with adaptive behaviours.	Probationers were only accessible sample. Self-report bias.	High

Notes. TriPM = Triarchic Psychopathy Measure; PPI-R = Psychopathic Personality Inventory; LSRP = Levenson Self-Report Psychopathy; SRP-III = Self-Report Psychopathy; PM-MRV = Psychopathy Measure—Management Research Version; PPD-PRCL = Psychopathic Personality Dimensions and Positively Reinforced Corporate Labels; FFM = Five Factor Model; PCL-R = Psychopathy Checklist Revised

Results

Study characteristics

All 19 studies were published between 2002 and 2019; reflecting the steady growth of interest in the field of successful psychopathy. With the exception of two studies, which had an all-male sample, the majority of the sampled studies reported on both male and female participants ($n = 15$). Additionally, one study provided a content analysis of newspaper advertisements, and a further study examined historical data of presidents of the United States. Most of the studies were conducted in the U.S. ($n = 8$) and Europe ($n = 6$), with others spanning Asia ($n = 1$), Australia ($n = 2$), and one cross-national study.

Seven different measures were used to assess psychopathic traits. The most common measure was the Psychopathic Personality Inventory (PPI; Lilienfeld & Andrews, 1996), including the revised (PPI-R; Lilienfeld & Windows, 2005) and short-form versions (PPI-R-SF; Lilienfeld & Windows, 2005) ($n = 8$), followed by the Self-Report Psychopathy form version three (SRP- III; Hare & Neumann, 2012; Vitacco et al., 2005) ($n = 3$), the Triarchic Psychopathy Measure (TriPM; Patrick, 2010) ($n = 3$), and the Levenson Self-Report Psychopathy measure (LSRP; Levenson et al., 1995) ($n = 3$). The remaining measures capture psychopathic traits in corporate or management environments; Psychopathy Measure-Management Research Version (PM-MRV; Boddy, 2010) ($n = 2$), Wexler's *Psychopathic Personality Dimensions and Positively Reinforced Corporate Labels* (PPDPRCL; Wexler, 2008) ($n = 1$). Finally, one study used Fiver-Factor model derived prototypes to assess psychopathic tendencies (FFM; Miller et al., 2001). Some studies used a combination of these measures to assess psychopathy. The full breakdown of each of the included articles can be found in Table 1.

Major findings

As a first step to expanding the understanding of successful psychopathy within general populations, a qualitative synthesis was performed. We assessed the main findings discussed in the selected papers within the review and discuss them and their relevance to the construct of successful psychopathy.

Fearless Dominance

Fearless dominance can be defined by three unique sub-scales, fearlessness, stress immunity, and social potency (PPI-R). Five studies primarily examined the relationship between fearless dominance (FD) and outcomes of success. Dalkner et al. (2015) observed that FD (as measured by PPI-R) was associated with reduced stress, and increased social influence, adaptive coping, stress immunity, and fearlessness. This suggests that those with high levels of FD have a blunted stress response or are more effective at coping with the symptoms of stress, thus making them more resilient in daily life, which is a prominent feature of success.

Eisenbarth et al. (2018) reported positive associations between FD (PPI-R-40) and both professional satisfaction and material success, which can be considered direct indicators of success, and negative associations with both depression and anxiety. FD was also shown to correlate with better executive functioning - specifically the ability to move freely from one task to another better emotional control, taking initiative, working memory, planning and organisation, and task monitoring, skills associated with successful outcome behaviours.

Three studies found positive associations of FD with income and leadership skills (Lilienfeld et al., 2014), likelihood of holding everyday leadership or management positions (Lilienfeld et al., 2014), better presidential performance in terms of leadership, persuasiveness, and crisis management, in addition to having the ability to initiate new projects and become a world figure (Lilienfeld et al., 2012).

One paper found FD positively correlated with adaptive behaviours across a composite comprising conceptual, social, practical, and general behaviours (Young-Lundquist et al., 2012). Based on the included studies, FD is an adaptive quality, which lends itself to various means of success, and it is also cited in other themes listed below.

Stress Immunity and Vulnerability

Three studies investigated the relationship between psychopathic traits and emotional distress (e.g., stress). Dalkner et al. (2015) found that the FD domain of psychopathic personality (PPI-R) was negatively associated with stress, and positively associated with adaptive coping and stress immunity. Međedović et al. (2018) identified negative associations between the affective-interpersonal dimension of psychopathy (SRP-III) and both stress and anxiety. Moreover, the antisocial dimension was negatively associated with episodes of depression and positively associated with anxiety.

In comparison, psychopathic (maladaptive) lifestyle traits (e.g., impulsivity, irresponsibility, and lack of long-term goals) were associated with increased vulnerability for depression. Finally, the adaptive qualities were more prominent in males than females, suggesting sex differences.

Eisenbarth et al. (2018) investigated psychopathic traits (PPI-R-40) and professional success. They found negative associations between FD, depression and anxiety, suggesting resilience to internalising psychopathology.

Cognitive Performance, Neural Activation, and Executive Functioning

One study (Gordon et al., 2004) investigated the functional differences in emotion recognition, as a function of psychopathy (PPI; Lilienfeld & Andrews, 1996). High and low

psychopathy groups did not differ in terms of speed or accuracy. However, high scores in the affective-interpersonal subscale were associated with activation in brain regions implicated in working memory (i.e., the visual cortex and the right dorsolateral prefrontal cortex), whilst low scorers activated regions implicated in emotion (e.g., inferior frontal, medial prefrontal, and amygdala). These findings suggest that distinct cognitive strategies were used to complete the task, working memory may compensate for impaired affective processing. Similarly to how the presence of enhanced cognitive controls enable young adults with callous-unemotional traits to implement effective strategies to achieve their goals (Baskin-Sommers et al., 2015).

These skills could explain how those scoring high on psychopathic traits compensate for a lack of affective processing when communicating with their peers by using cognitive strategies rather than emotional ones, allowing them to appear emotionally intelligent.

Two papers investigated executive functioning (EF) and psychopathic traits. Lantrip et al. (2016) conducted hierarchical regressions and correlations and found FD (PPI; Lilienfeld & Andrews, 1996) was associated with better emotional control and cognitive flexibility, but worse inhibitory control. This could be due to shared variance with Antisocial Impulsivity (AI) which was associated with poor inhibitory control and ability to monitor the effect of their behaviour on others.

Pasion et al. (2018) used hierarchical linear regression to investigate the relationship between psychopathic traits (TriPM; Patrick, 2010) and executive functioning (EF), assessed via survey and experimental tasks. They found that Boldness was associated with an enhanced ability to inhibit automatic responses, further reinforcing the adaptive potential of Boldness (Patrick et al., 2009). Meanness, on the other hand, was related with high interference scores and a lack of inhibitory control, predicting impulsive behaviour. Disinhibition explained updating dysfunction but did not predict lower inhibitory control. This later finding is unusual,

warranting further confirmation, but suggests stronger links between the Disinhibition factor and working memory, than inhibitory control.

Corporate Psychopathy and Professional Success

In brief, corporate psychopathy refers to individuals with psychopathic traits who work in corporate environments which have a multi-tiered management system. One paper investigated psychopathy in corporate managers, where greater levels of psychopathy (PM-MRV; LSRP) were observed in more senior-level managers (Spencer & Byrne, 2016). Another paper investigated corporate psychopathy (PM-MRV) and workplace behaviours (Boddy, 2014). Corporate psychopaths were seen to exhibit more counterproductive workplace behaviours and workplace conflicts relative to 'normal' (e.g., non-psychopathic or non-dysfunctional) managers. Additionally, they were shown to have a negative effect on employee well-being. Alongside dysfunctional managers, corporate psychopaths were observed to be yelled at more, be the subject of rudeness, and work in environments where unfavourable treatment was witnessed. This suggests that the presence of corporate psychopaths and dysfunctional managers were not conducive of a supportive, achievement-driven work environment. This could imply that these individuals were antagonistic, promoting themselves, whilst causing distress for other employees.

One paper looked at academic achievement in both business and psychology students (Hassall et al., 2015). Psychopathic traits (SRP-III) were reportedly higher in Business students than Psychology students. Of the psychopathic facets, only antisocial behaviour correlated negatively with grade point averages. Contrary to previous research (Babiak et al. 2010) suggesting that psychopathy was related to charisma and presentation as an advantage in business fields, Hassall et al. (2015) found no link between any psychopathy factor and (Business) academic success, therefore, despite not measuring charisma and presentation styles

within their own study, suggests that charisma and presentation were not associated with academic success.

One paper performed a content analysis for the inclusion of characteristics prominent in psychopathic personalities (PPDPRCL) on 25 executive job advertisements (Hill & Scott, 2019). The results demonstrated that corporations are seeking applicants with traits synonymous with factor 1 psychopathy, with 96% of adverts seeking those with the affective-interpersonal traits associated with psychopathic personality.

Two papers investigated professional success and psychopathic traits. Eisenbarth et al. (2018) demonstrated that the FD facet of psychopathic personality was a positive predictor of professional satisfaction and material success. Self-centred impulsivity (but not Cold-heartedness) was a negative predictor of professional satisfaction but was unrelated with material success. The affective-interpersonal facet (i.e., fearless dominance PPI-R) was associated with higher annual income and corporate rank, as well as professional success (to a lesser extent; Howe et al., 2014). Thus, suggesting links between FD and reaching a moderate level of professional success.

Socioeconomic Status

Two studies (Lilienfeld et al., 2014; Persson & Lilienfeld, 2019) investigated socioeconomic status as an indicator of success in those with psychopathic traits. Persson et al. (2019) demonstrated that the boldness facet of the TriPM was positively associated with the education, income, and ladder facets of measures of socioeconomic status (SES). Meanness was positively associated with education, whilst disinhibition was negatively associated with all facets of SES. This demonstrates how different facets of psychopathy Differentially interact with socioeconomic status. Additionally, the FD facet of the PPI-R was positively associated with higher income (Lilienfeld et al., 2014).

Pride

One paper discussed psychopathic traits and pride (Costello et al., 2018). FD has been significantly associated with two subtypes of pride (authentic, hubristic), although it had larger associations with authentic pride, consistent with its adaptive conceptualisation (*c.f.* Lilienfeld et al., 2012). Authentic pride, however, moderated the relationship between FD and transformational leadership behaviours, such that the interaction accounted for a significant increase in the variance of the outcome. The findings demonstrate that authentic pride may be a partial shaping force in adaptive or successful psychopathy.

Leadership

Two studies investigated the relationship between psychopathic personality traits and leadership. Lilienfeld et al. (2014) investigated how psychopathic personality traits correlate with leadership. They demonstrated a positive association between FD (PPI-R; Lilienfeld & Windows, 2005) and leadership. Additionally, cold-heartedness, and self-centred impulsivity were also positively correlated with leadership. Westerlaken and Woods (2013) investigated psychopathic traits, as measured by the SRP-III, and leadership.

Results demonstrated that those scoring high on the composite psychopathy scale were less likely to demonstrate transformational leadership behaviours (e.g., inspiring, mentoring, and guiding others). Ultimately, those with psychopathic tendencies are more notably identified with passive or avoidant leadership styles, demonstrating behaviours such as evading decision-making and relinquishing responsibilities (Avoilio et al., 1999; Bass, 1999; Sarros & Santora, 2001). Lilienfeld et al. (2012) performed a content analysis of psychopathic traits (NEO-PI-R; FFM-derived prototypes) and presidential performance using 10 dimensions of job performance; overall performance, public persuasiveness, handling of crises, moral authority, economic management, international relations, administrative skills, congressional relations,

setting of an agenda, and pursuit of equal justice. One-hundred and twenty-one expert raters completed a questionnaire evaluating the performance and behaviour of previous presidents and their character as it pertains to psychopathic traits. They found that boldness, as derived from FFM data was associated with superior presidential performance, but also with dimensions relevant to FD, such as leadership, communication, persuasiveness, willingness to take risks, and crisis management.

Punishment Sensitivity

One paper (Osumi & Ohira, 2017) investigated punishment sensitivity and fairness in psychopathy as measured by the LSRP. The LSRP comprises two factors, i) primary psychopathy, which reflects affective and interpersonal features and ii) secondary psychopathy, which addresses social deviance behaviours. A game scenario instructed individuals to offer money to another player based on the game dynamics. Those with higher composite psychopathy scores made larger offers when a low offer could trigger a punishment from the recipient, indicative of high punishment sensitivity. Primary psychopathy (PP) was associated with lower monetary offers to a stranger, both when there is a possibility of punishment and when there is not. PP was also associated with smaller offers when they were asked to imagine the partner was their friend. These findings suggest that PP is associated with a deficit in their sense of fair behaviours. Secondary psychopathy (SP) was not associated with any differences in fairness regardless of the potential for punishment or relationship to the partner player.

Social Adaptation

One paper (Baird, 2002) investigated social adaptation in psychopathy, as measured by the LSRP. This self-report study demonstrated that high primary psychopathy (PP) levels did not hinder social experience, however they did not demonstrate an association to any social

benefits either. Secondary psychopathy (SP) was found detrimental to social functioning in terms of peer evaluation. These findings suggest that PP is associated with better social adaptation, whereas SP would be disadvantageous in regard to social functioning.

Discussion

The current study is the first to systematically review existing empirical support for the concept of successful psychopathy. This construct represents individuals who present psychopathy-related personality traits, behaviours, and/or tendencies, yet function normally (or to a superior level) in society and may use such traits to adapt and facilitate their own success.

Synthesis of Major Findings

The synthesised evidence suggests that successful psychopathy is best-defined by an amalgamation of two of the three proposed theoretical models of successful psychopathy (Lilienfeld, 2015); Differential-Configuration (DC) and Moderated-Expression (ME). This is indicated by the combination of FD and affective-interpersonal traits, which are more consistently associated with success, but an absence of impulsivity and erratic lifestyle. Moderating factors include stable socioeconomic status, authentic pride, and sex. Whilst Differential-severity (DS) was not measured by any of the included papers, it should not be ruled out. It could be suggested that moderate levels of psychopathy could enable an individual to become more successful, but extremely high levels could be detrimental to successful outcome.

Across the papers, a relatively consistent picture emerged regarding the presence of FD as an adaptive psychopathic trait, suggesting that the construct of successful psychopathy is most closely associated with high levels of FD as a whole. None of the included studies provided in-depth analyses of the sub-facets of FD, for example social potency (a desire to dominate social situations), stress immunity (invulnerability to anxiety, stress, and depression),

and fearlessness (a willingness to take risks without fear of reprisal). As such, future studies may need to tease apart these components to investigate whether all are involved or just an individual facet.

FD was associated with reduced stress and positive adaptive coping styles (Dalkner et al., 2015), professional satisfaction and material success (Eisenbarth et al., 2018; Howe et al., 2014), higher income (Lilienfeld et al., 2014), authentic pride (Lilienfeld et al., 2012), leadership (Lilienfeld & Windows, 2005), and adaptive behaviours (Young-Lundquist et al., 2012). Moreover, two papers explored the relationship between EF and psychopathic personality traits (Lantrip et al., 2016; Pasion et al., 2018), which demonstrated that FD was associated with better emotional control and cognitive flexibility. This suggests that affective-interpersonal traits (e.g., superficial charm, lack of empathy, and manipulation, as defined by PPI-R & TriPM), such as FD, can enhance specific aspects of EF. This is in line with previous research proposing intact or superior EF is key to defining successful psychopathy (Lilienfeld et al., 2015). Based on the studies discussed, it is clear that the affective-interpersonal facet of psychopathy has strong adaptability potential, personally, socially, and professionally.

On-the-other-hand, the presence of high antisocial behaviour and related traits were associated with higher levels of stress and anxiety in individuals with high levels of psychopathic traits (Dalkner et al., 2015; Međedović et al., 2018). This would support the Differential Configuration model whereby a specific combination of FD and affective-interpersonal traits, with the absence of (or at the very least reduced) antisocial behaviour, underpins the more adaptable outcome behaviours and potential success.

Successful psychopathy is most prominently discussed in terms of professional achievement, however, findings surrounding corporate psychopathy or professional success with psychopathic traits demonstrated some conflicting positions. Firstly, there were accounts of individuals with psychopathic traits being more likely to be in senior management positions

(Spencer & Byrne, 2016), acquiring professional success (Howe et al., 2014), and corporations seeking out those who exhibit psychopathic traits for executive job positions (Hill & Scott, 2019). However, Boddy (2014) demonstrated that corporate psychopathy was associated with maladaptive workplace behaviours and unfavourable workplace environments. This creates a juxtaposition in terms of individuals with psychopathic traits gaining these positions of power and influence in the first place, and their conduct once they achieve their goal thereafter. This lends support to the notion that even if adaptive traits are present allowing for initial success and to fly under the radar (Widom, 1977), maladaptive tendencies and negative consequences prevail and will sooner or later be detected (e.g., Kiehl & Lushing, 2014). Alternatively, the manipulative nature of psychopaths may allow them to ameliorate or mute maladaptive tendencies for a while to circumvent detection during the recruitment process, by reducing the expression of their maladaptive qualities or emphasise a different configuration of their traits to disguise their darker undertones.

In support of the Moderated-expression model (Lilienfeld et al., 2015), several external moderating factors were prominent within the review. Socioeconomic status was indicated as a protective external factor in terms of enabling an individual with psychopathic traits to become successful. Individuals who scored high on the boldness facet of the TriPM are associated with better educational backgrounds and higher income (Persson et al., 2019). This suggests that ME may also be useful in developing and understanding the trajectory of successful psychopathy, as early life experiences may moderate the outcome behaviours and allow individuals to learn different survival strategies. Another factor highlighted was the presence of healthy pride, conceptualised as the presence of high self-esteem and reward for appropriate behaviours, but also guilt for inappropriate behaviours (Costello et al. 2018). This acts as a moderator between FD and more transformational leadership qualities.

Additionally, even though FD is underpinned by punishment insensitivity or a lack of fear, consideration of consequences during conflict could moderate behaviour to prevent maladaptive outcomes (Osumi & Ohira, 2017). Thus, higher psychopathic traits indicated an aversion to potential punishment under certain circumstances. Therefore, the key to reducing the disruptive qualities associated with individuals with psychopathic traits may be by introducing these softening or adaptive characteristics, as suggested by the ME model of psychopathy, to alter the outcome behaviours. Potential moderators, such as authentic pride and the desire to avoid detrimental ramifications of their behaviours, alongside FD could be considered fundamental in identifying and attaining success with psychopathic traits.

Limitations and Future Directions

This systematic review advances our understanding of the delineation and emergence of the concept of successful psychopathy. However, it might be considered limited in the following ways: firstly, the psychometric psychopathy scales used varied across studies, with each measuring a somewhat differing construct. Additionally, studies using the PCL-R were removed from the paper, as the reliance on using forensic populations and the prominence of violent antisocial behaviour was too great and did not fit the theme of the review. However, within psychopathy research it is still considered the gold standard of measurement and the majority of studies within the field use either this measure or forensic samples. Thus, empirical evidence for the construct may be reduced, as an entire subgroup of research is not included, and this also inhibits investigating successful psychopathy as an oxymoron.

Second, the majority of successful psychopathy research is grounded in professional achievement and status and does not offer a wider view of life success. Therefore, it is difficult to extrapolate from this how these traits would apply to various forms of success, such as general life success. There has been some investigation into psychopathy and mating strategy, but as this review was predicated on the term 'successful psychopathy', this research did not

appear in any stages of the review, as success within mating does not necessarily imply a successful psychopath.

It could be suggested that to get a wider view of the construct the use of a life success measure (Parker & Chusmir, 1992), which looks at not only professional success but success in relationships, personal fulfilment, contribution to society, and security. This could have improved this systematic review as it would have allowed the reviewer to see the application of psychopathic traits in alternative areas and various aspects of life. Future research should focus on unifying the prominent features of successful psychopathy and further developing this construct, discuss the significance of antisocial behaviour to the personality framework, and consider the relevance of existing psychopathy measures when investigating successful psychopathy and their applicability to the construct.

Conclusions

This is the first systematic literature review to analyse the construct of successful psychopathy within general populations. Our results suggest that whilst there are many theoretical conceptualisations of the successful psychopath, there exists limited empirical data which can accurately provide a tangible image of this individual. Where other data has been generated to supplement this deficit, this is limited to forensic samples using the PCL-*R* which is inherently obscure for this kind of research. Most prominently due to the importance placed on antisocial, violent, and criminal behaviour, which would not reflect an inclusive view of the construct as success is only considered in terms of capture delay and a lack of reoffending behaviours.

Taken together the findings of this systematic review suggest that successful psychopathy is a complex framework, most simply defined as the lack of antisocial behaviours, the presence of adaptable traits, and positive external factors such as stable socioeconomic

status, which provide the best pathway to applying their natures to more successful means. Moving forward with this construct, it would be appropriate to consider a unified framework as described in the introduction to encapsulate all models of successful psychopathy.

Chapter 4. The Development and Validation of the Successful Psychopathy Scale

Note. This chapter is currently under review for publication within the Journal of Personality Assessment and is here presented as the submitted manuscript.

Introduction

It is estimated that around three million employees within the workforce are, by all accounts, individuals with high psychopathic traits (Schuette et al., 2015). Though psychopathy is typically studied in forensic or clinical contexts, contemporary conceptualisations view psychopathic traits as being continuously, albeit non-normally, distributed in the general population (Edens et al., 2006; Marcus et al., 2004; Neumann et al., 2015). Psychopathic traits have been previously associated with a rise in power and success (Cheng et al., 2010) with around 3.5% of top executives believed to be high scoring on psychopathy personality measures (Babiak & Hare, 2006; Babiak et al., 2010). When we consider psychopathic traits within a work environment, it is often thought of as dysfunctional management style and poor team playing abilities. However, these individuals are also associated with superior communication skills and strategic thinking (Babiak et al., 2010), conscientiousness and extraversion (Mullins-Sweatt et al., 2010), and entrepreneurship and positive employment outcomes (Ahktar et al., 2013). Additionally, individuals with high levels of psychopathic traits are associated with boldness, dominance, and the ability to persuade others to adhere to their suggestions, all of which can contribute towards attaining positions of leadership or power, as well as overall occupational success (Babiak & Hare, 2006; Lobaczweski, 2007).

Whilst most of the psychopathy literature focuses on the maladaptive and antisocial side of psychopathy in forensic or clinical context, a more underexplored area is that of

successful psychopathy, which emphasizes psychopathic features in more adaptive contexts. However, there are different propositions around its conceptualization and there is no successful psychopathy psychometric measure to assess these traits within general populations. Therefore, current paper reports the development and validation of the Successful Psychopathy Scale.

Classical Conceptualisations and Positive Adjustment in Successful Psychopathy

Psychopathy, in a clinical/forensic context, is characterized by callous-unemotional traits (CU), superficial charm, diminished remorse and empathy, dysfunctional impulsivity, and poor behavioural control (Hare & Neumann, 2005). The study of psychopathic traits within both forensic and non-forensic adult samples has grown exponentially over recent years (Lilienfeld & Fowler, 2006; Michels & Roth, 2021). Conceptualisations of psychopathy include superordinate formations (“psychopathy” as a unitary construct), two higher-order factors encompassing interpersonal-affective deficits and impulsive-antisocial behaviour (Benning et al., 2003), which are further split into three and four-factor models (Cooke & Michie, 2001; Hare & Neumann, 2008), as well as operationalised personality constructs (e.g., “Boldness, Meanness, Disinhibition”, Triarchic Psychopathy Measure, TriPM; Patrick et al., 2009).

A primary unresolved issue is whether antisocial behaviour should be considered a core trait or an outcome (Cooke & Michie, 2006; Cooke & Selbom, 2019), and whether positive-adjustment traits (e.g., lack of delusion, lack of internalisation, and emotional stability) as identified by the seminal work of Cleckley (1955; 2016) are essential to psychopathy. Contemporary clinical conceptualisations (Psychopathy Checklist Revised; PCL-R; Hare, 1995), and sub-clinical derivatives (e.g., Self-Report Psychopathy scale; SRP; Hare, 1980; Paulhus et al., 2016), place more weight on the importance of predicting criminal, violent, and antisocial behaviours, in line with the typical target (i.e., forensic

population) to be assessed. However, these assessments are less likely to tap into some of the potentially adaptive aspects of psychopathic personality and how these could be reflected and manifested within the general population.

The successful psychopath refers to an individual who encompasses the core traits of psychopathy, whilst being able to assimilate within society with intact or superior (successful) functioning (Lilienfeld, 2015). Such individuals are thought to be able to gain status and resources whilst exuding minimal effort (Babiak & Hare, 2006), and may display adaptive characteristics, such as resilience (Watts et al., 2017), intact executive functioning (Lantrip et al., 2016), and a dominant interpersonal style, which enables establishment of superficial rapport (Hare, 1999). Thus, successful psychopathic traits might include superficial charm, callous-unemotional affect, manipulative interpersonal tactics, and reduced shame, guilt, and remorse (Cale & Lilienfeld, 2002; Lilienfeld & Windows, 2005; McCord & McCord, 1964), as well as a lack of affective empathy, or the presence of dark empathic traits which may indicate preserved levels of emotional intelligence (Davis & Nichols, 2016; Heym et al., 2021).

Whilst such features are shared with the prototypical psychopath, they might also be present in individual's who abstain from antisocial/criminal behaviour (Hall & Benning, 2006) and achieve successful outcomes in, for example, occupational domains (Smith et al., 2014), such as by gaining positions of leadership (Judge & Lepine, 2007). Certain psychopathic traits may in fact be adaptive or desirable in certain professions, increasing effectiveness and/or stress resilience (e.g., preventing internalisation problems) (Babiak & Hare, 2006). Thus, support for the successful psychopath concept is growing (e.g., Lilienfeld et al., 2015; Wallace et al., 2022), emphasizing the positive-adjustment traits indicated by Cleckley (1955/2016). Therefore, the current paper develops and validates a novel psychometric measure, which focuses on adaptive aspects of the psychopathic personality.

Models of Successful Psychopathy

Successful psychopathy is something of a paradoxical term (Kiehl & Lushing, 2014) as the definition of psychopathy as a personality disorder suggests impairment in several domains of functioning, however there are examples of other severe pathologies which have been noted as not hindering the attainment of successful life outcomes (Grandin, 2010; Saks, 2007). Therefore, psychopathic traits cannot be wholly considered as an obstacle to achieving life goals, as others with potentially disruptive disorders have managed to overcome the maladaptive tendencies of their personality. Although the profile of successful psychopathy is not formally agreed on, there are three models that aim to conceptualize the construct (Hall & Benning, 2006; Lilienfeld et al., 2015). First, the *Differential-severity model* posits that successful psychopathy is a unitary construct whereby individuals differ only in the severity of the disorder's manifestations and intensity. Second, the *Moderated-expression model* suggests that successful psychopathy is an atypical development due to emerging protective factors such as stable socioeconomic status (Zwaanswijk et al., 2018), positive early childhood experiences (Dargis et al., 2016), and intact or superior executive functioning (Ishikawa, 2001; Thompson & Centifanti, 2018), which protect against maladaptive outcomes. Third, the *Differential-configuration model* presumes that successful psychopaths share the same traits as prototypical psychopaths, yet demonstrate adaptive traits such as conscientiousness, self-discipline, boldness, and low levels of agreeableness that are less common in prototypical psychopathy (Mullins-Sweatt et al., 2010).

A better understanding of what constitutes the successful psychopath would contribute towards addressing outstanding questions within the field as to whether i) psychopathy is inherently based upon personality traits or behavioural outcomes (Cooke & Michie, 2004; Skeem & Cooke, 2010), and ii) outside the context of antisocial/criminal behaviour, affective-interpersonal psychopathic traits should be conceptualized as a

pathology or strategic (Murphy & Stich, 2000). Within this context there is a need for a greater understanding of the potentially atypical development of successful psychopathy and how this may manifest within the general population, and the implications this may have.

Research on successful psychopathy has predominantly focused on incarcerated populations, specifically male offenders, and so is inherently problematic. When discussing successful psychopathy, it is important to demonstrate not only the avoidance or delay of negative outcomes, but some measure of bona fide agentic success (Patrick, 2019). Furthermore, by focusing research on incarcerated males, we miss the opportunity to investigate potential protective factors, which may prevent the onset of antisocial behaviour (Lilienfeld, 1994), and help identify areas of life that are impacted by these protective factors. Further investigation is needed to accurately identify these core psychopathic traits, as well as additional adaptive and potentially moderating factors, which may alter outcome behaviours of an individual with psychopathic traits.

Moreover, non-clinical manifestations of psychopathic traits are of interest as even without engaging in criminal activities they offer an alternative perspective of individuals who consistently breach social norms and values to the detriment of others. For example, individuals with elevated levels of certain psychopathic traits may be more equipped to achieve professional or personal success in some situations due to their indifference to the suffering of others. Despite their indifference they may be able to feign empathy towards others if they feel an individual has assets that may help them achieve their own personal goals. Alternatively, these individuals may fall under a recently defined psychological construct called the Dark Empath, characterized by clustered dark traits (e.g., narcissism, Machiavellianism, and psychopathy) with empathic capacities suggesting elevated levels of emotional intelligence (Heym et al., 2021). Therefore, it is important to discuss interpretation

of “success” as a concept, and whether this is referring to superior functioning in one or more areas of life, or more simply the absence of severe negative outcomes (e.g., incarceration).

Operationalisation of Successful Psychopathy

The definition of successful psychopathy is widely open to interpretation due to the lack of an operationalised definition of success. Certain aspects of the psychopathic personality (e.g., superficial charm, lack of internalisation, and manipulative tactics) may be useful to the interpersonal components of transformational leadership, which encompasses enthusiasm, optimism, and clear vision (Bass & Avolio, 1997). However, these beneficial components are only positively associated with the boldness aspect of psychopathy and negatively with meanness and disinhibition (Neo et al., 2016; Smith et al., 2013; Westerlaken & Woods, 2013). Additionally, psychopathic traits have been associated with fewer counterproductive work behaviours and more socially adaptive behaviours, when moderated by political skills. These skills include social astuteness, interpersonal influence, networking ability, and apparent sincerity (Schuette et al., 2015). Furthermore, Lilienfeld et al. (2012) investigated presidential performance using expert ratings which suggested that fearless dominance, as measured by the Psychopathic Personality Inventory (PPI; FD; Lilienfeld & Andrews, 1996) was associated with better presidential/political performance as assessed by leadership, persuasiveness, and crisis management whereas self-centred impulsivity indicated negative performance. This suggests that some, but not all, aspects of the psychopathic personality were useful and resulted in successful occupational performance.

More recent advances within the field of successful psychopathy have seen the development of an adaptive psychopathic traits scale to identify potential traits that ameliorate detrimental outcomes associated with psychopathy. The Durand Adaptive Psychopathic Traits Questionnaire (DAPTQ; Durand et al., 2019) is a 38-item measure

consisting of 8 sub-scales: leadership, logical thinking, composure, creativity, fearlessness, focus, extraversion, and management. However, except for fearlessness, the sub-scales within the DAPTQ primarily identify adaptive traits or qualities applicable to most individuals but not essential to the construct of successful psychopathy under any currently defined parameters or models. Although this model primarily addresses Factor 1 (F1) psychopathy traits, it does not identify the usefulness or adaptive quality of callous-unemotional traits, which classify as a lack of regard for others, lack of empathy and cold-hearted nature. These traits are arguably key within the defining parameters for psychopathy (Crego & Widiger, 2022). Moreover, the sub-scale of creativity debatably does not map onto the typical conceptualisations of psychopathy (Jonason et al., 2017).

Finally, it could be argued that an 8-factor scale is rarely considered conceptually sound within psychometrics due to the interpretative challenges (Comrey, 1988; Worthington & Whitaker, 2006). A recent systematic review has highlighted the main constructs involved in successful psychopathy, namely, fearless dominance, stress immunity, pride, social skill, good executive functioning and leadership (Wallace et al., 2022).

Summary and Aims of This Chapter

Taken together, controversies remain as to the definition of psychopathy and its core components, and what should be considered the necessary traits an individual must exhibit to be considered psychopathic. As such, the current paper aims to develop a psychometrically sound measure of successful psychopathy within general population samples by incorporating constructs previously identified (Wallace et al., 2022). A pilot study used Deductive Rational Strategy and recaptured scale techniques (RST; Burisch, 1984), to develop and initially define the construct using existing theoretical models, this was then tested using Classical Test Theory (CTT) to determine scale construction. Following RST and CTT, Rasch analysis

was used to validate items and establish reliability and internal validity of SPS measure, and its shorter form, the Successful Psychopathy Scale (SPS). Both studies included cross-sectional analyses to test the concurrent and predictive validity of the scale within its pilot, revised, and short form versions, respectively.

Study 1: Development and Piloting of the SPS Items

The primary aim of this pilot study was to develop an initial item pool, which would be subject to further testing and validation. To date, little research has been conducted to both theoretically and empirically define successful psychopathy, but also test how these successful psychopathic traits predict success and the expectation of success within appropriate domains. This paper documents the systematic development and validation of a scale designed to measure successful psychopathy. Within this pilot study an initial item pool of 175-items was tested within the parameters of reliability, CTT, also known as Exploratory Factor Analysis (EFA). Once the piloted scale had been created it was then subjected to tests of concurrent validity and predictive validity using existing psychometric measures of psychopathy, political skills, and workplace performance. It was expected that successful psychopathy would be positively associated with affective and interpersonal facets within existing psychopathy measures, different facets of political skill, and workplace performance at an individual and organisational level, but negatively associated with team workplace performance.

Method

Participants

After removing cases where more than 5% of the data were missing a total of 208 UK-based participants (82.7% female, $M_{\text{age}} = 23.90$ years, $SD = 7.82$) completed an online questionnaire, which was advertised through social media and hosted by Qualtrics. Despite

the modest sample size, this was larger than a previously conducted pilot study in a similar area (e.g., Caring Uncaring Emotional Inventory, CUE; Semel, 2016). Additionally, it was noted that the sample was disproportionately female, therefore, it was ensured that the following study (study 2) had an equal split.

Item Development

Deductive Rational Strategy and recaptured scale techniques (Burisch, 1984) were used when designing the successful psychopathy scale (SPS). One hundred and seventy-five ($n = 175$) items were developed according to theoretical models of successful psychopathy, adaptive traits, and professional success (e.g., Lilienfeld's models of successful psychopathy, 2015). Items written to tap into the presence of impulsivity, social charm, CU traits, and boldness in line with Cleckley's (1955/2016) original conceptualisation of psychopathy within general population. Items written to tap into success, reflected personality aspects such as drive (e.g., *"I put in effort to get things I want"*), persuasiveness (e.g., *"I know how to get people to do what I want"*), resilience (e.g., *"Stressful events rarely affect me as much as they do to others"*), and locus of control (e.g., *"I lead on tasks"*). Additionally, items conveyed both specific (e.g., *"I am quite cold-hearted"*) and general (e.g., *"Gaining success is tough; it's all about survival of the fittest"*) conceptualisations of successful psychopathy.

Additional items reflecting relevant aspects of the Big-5 (Goldberg, 1993) were also included because the five-factor model (FFM) is still considered the gold standard of personality measurement (Mengelkoch et al., 2022) and has been suggested to be capable of identifying psychopathic personality traits; for example, through low agreeableness and low conscientiousness (Ross et al., 2004). The FFM has consistently demonstrated its empirical ability to align with and map onto aspects of the prototypical psychopathy construct (Ruchensky & Donnellan, 2017), and theoretically with the successful psychopathy construct

(Lynam & Widiger, 2007). Whilst other models of personality such as the HEXACO model (Lee & Ashton, 2004) have been explored with psychopathy (Duvall & Stivers, 2023; Schwartz et al., 2023), existing measures of psychopathy such as the TriPM (Međedović (2017; Ruchensky & Donnellan, 2017) and the FFM (Lynam, 2002; Lynam & Derefinko, 2006; Widiger & Lynam, 1998) can better explain external correlates of psychopathy, indicating it may not be an adequate model for psychopathy scale development. Furthermore, clinical models such as the PID-5 has its utility in assessing psychopathic traits (see Strickland et al., 2013), however, this is predominantly focused on psychopathy as a disorder and its maladaptive qualities (see Rissing & Reinhard, 2017), which are better suited for future research comparing subtypes, rather than as a measure used to assist in item generation.

Furthermore, items were written to relate to a range of themes within the successful psychopathy literature, including relevant aspects from the Psychopathic Personality Inventory (PPI; Lilienfeld & Andrews, 1996) and the Triarchic Psychopathic Measures (TriPM; Patrick et al., 2009), such as fearlessness (e.g., *“Dangerous situations excite me”*), stress immunity (e.g., *“When things don’t go my way, I bounce back quickly”*), social charm (e.g., *“I have the ability to get people out of their shells”*), and callousness (e.g., *“I am rarely disturbed by the misfortunes of others”*). When creating these items, it was important not to be too specific regarding the context of success due to its subjectivity, instead, the items tackled a variety of life domains, such as personal and professional. These items were scored on a 5-point Likert Scale.

Expert Ratings

Expert judges have been the most widely utilized tool for analysing content validity (e.g., Uzunboylu and Ozdamli 2011; Zhang et al. 2010). Previous studies have also found expert opinion to be the most common qualitative method for the elimination of unsuitable

items in scale development (Kapusinski and Masters 2010; Ladhari 2010). A subsample of the initial item pool ($n = 36$) was presented to a group of sixteen academic experts within the field of psychopathy, who were asked to estimate potential factor loadings (from -1 to 1) of these items under a single component structure of successful psychopathy via a Qualtrics link.

The academic experts were chosen due to their prolific research profiles within the field of psychopathy and were contacted via their professional email addresses. The decision to use a survey response system opposed to interviewing was two-fold, initially it is time saving for both the experts and the researchers, and secondly interview prompts could potentially cause confirmation bias or the interviewer may have tendencies to identify issues or items that are not relevant (Beatty & Willis, 2007). The decision was made to contact academics only as this research is interested in psychopathy as a personality construct and not as a clinical profile for diagnostic purposes.

Items identified as potentially problematic or weak were noted and subjected to further scrutiny during the analyses, however, following these expert ratings there was only one item which the raters contested, and this was *“I make sure I am prepared before starting a task”*. This item was removed during the EFA due to poor loading ($< .2$). As a whole, the expert raters demonstrated that the sample items were appropriate for the definition of successful psychopathy due to suggesting high factorability for the appropriate items (e.g., *“Gaining success can be tough; it is all about survival of the fittest”*), however, they also suggested several items mapped onto conscientiousness (e.g., Mullins-Sweatt et al., 2010) and neuroticism, and these items could be reduced. Additionally, consideration of depictions of ‘motivation’ and ‘superficial success’ were also suggested for future scale development.

Additional Measures

All alphas reported were recorded within this original research.

The Triarchic Psychopathy Measure (TriPM; Patrick et al., 2009) is a 58-item self-report inventory of psychopathy that includes items rated on a 4-point Likert scale. The TriPM yields a total score with three domains; Boldness (19-items, e.g., “I am a born leader”; $\alpha = .80$), Meanness (19-items, e.g., “It doesn’t bother me to see someone else in pain”; $\alpha = .77$), and Disinhibition (20-items, e.g., “I jump into things without thinking”; $\alpha = .74$). Totals were calculated for the scale and the sub-scales, with higher scores indicating a higher presence of these traits.

The Work Role Performance scale (WRP; Griffin et al., 2007) is a 27-item measure of individual work performance that operationalises different aspects of work behaviour at different levels (individual, team, and organisation). The WRP scale yields a total score and has a 3 (individual, team, and organisation) x 3 (proactivity, activity, proficiency) grid of subfactors. The scale has been adapted to be used in a self-report format whereby only the initial 3 subscales (individual, e.g., “*I carry out the core tasks of my job well*”; Team, e.g., “*I am good at communicating effectively with my co-workers*”; and Organisation, e.g., “*I am good at coping with changes in the way my company operates*”) were used, and the time point of the past 2-months was removed. Within this sample, the total scale achieved high internal consistency ($\alpha = .87$) as did the nine sub-scales: Individual Proactivity ($\alpha = .75$), Individual Adaptivity ($\alpha = .76$), Individual Proficiency ($\alpha = .76$), Team Proactivity ($\alpha = .82$), Team Adaptivity ($\alpha = .73$), Team Proficiency ($\alpha = .80$), Organisational Proactivity ($\alpha = .83$), Organisational Adaptivity ($\alpha = .76$), and Organisational Proficiency ($\alpha = .74$).

The Political Skills Inventory (PSI; Ferris et al., 2005) is comprised of 18 items responded on a 7-point Likert-type scale. The PSI yields a total score with high consistency

($\alpha = .89$), with four domains: Networking (6-items, e.g., “I am good at building influential relationships with people at work”, $\alpha = .80$), Interpersonal influence (4-items, e.g., “I am good at getting people to like me”, $\alpha = .85$), Social astuteness (5-items, e.g., “I understand people very well”, $\alpha = .78$), and Apparent sincerity (3-items, e.g., “I try to show a genuine interest in other people”, $\alpha = .77$)

Procedure

The study was approved by a central university ethics committee at Nottingham Trent University and all protocols adhered to the central university and national ethical guidelines. Participants were recruited from social media were directed to online survey software Qualtrics to complete the measures. After consenting, participants completed demographic items, before responding to the pilot SPS items as well as measures of psychopathy, political skills, and work performance to validate the questionnaire. Afterwards, participants were thanked and debriefed. On average, the study took 15 minutes to complete.

Data Analyses

Initially an EFA was conducted to assess the construct validity of the SPS. Once the factor structure had been determined, pairwise correlations and hierarchical regressions using the SPS and TriPM were conducted to address the concurrent validity of the scale. As a final stage, the predictive validity of the scale was examined using the SPS and existing measures of professional success (WRP; Griffin et al., 2007; PSI; Ferris et al., 2005). This was achieved by conducting pairwise correlations and hierarchical regressions.

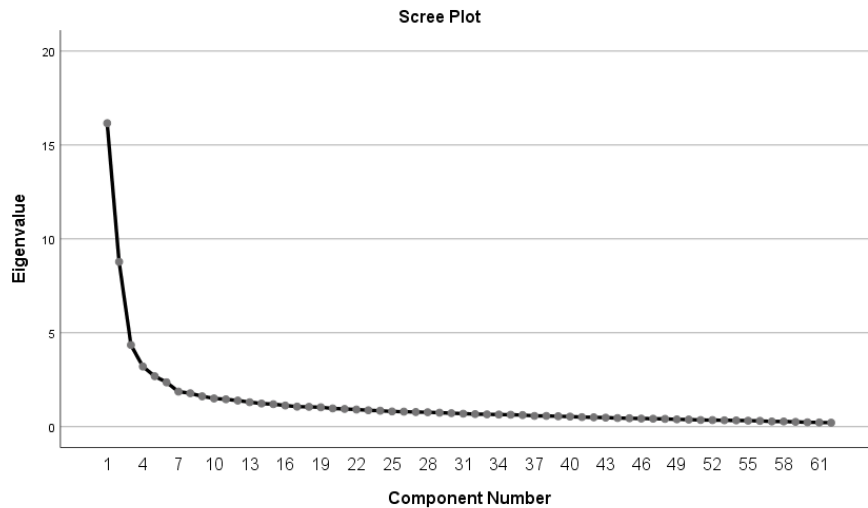
Results

Exploratory Factor Analysis and Initial Scale Development

An exploratory approach was used to identify the structure of the SPS inventory. The 175 initial items were subjected to a Principal Component Analysis (PCA) using SPSS Version 25. The Kaiser-Meyer-Olkin (KMO) measured the sampling adequacy at .78, slightly above the recommended value of .60 (Kaiser, 1970). Bartlett's test of Sphericity reached statistical significance, supporting the factorability of the correlation matrix ($p < .05$). The items were then forced into one component to identify items with poor loadings on a unidimensional scale ($< .2$) to be removed. Based on this initial screening process 111 items were removed due to poor loading, which is not unusual as scale development studies often include as many as 3 to 4 times the number of items in the development stage compared to those that will eventually end up in the final instrument (Worthington & Whittaker, 2006). Reliability analyses with two iterations were conducted on the single component scale to identify any further items with low inter-item correlations ($< .2$) for removal, leaving a 60-item scale. Parallel Analysis (Parallel Analysis Engine; Vivek et al., 2017) initially suggested a nine-component solution, however, the goal was to have an approximate simple structure (McDonald, 1985), therefore some of the suggested factors were rejected (e.g., Comrey, 1988; Worthington & Whitaker, 2006). Based on the single component structure, conceptually the ideal model fit would be either a 4, 5, or 6 component solution, which was supported by the scree plot (Figure 4.1).

Figure 4.1.

Scree Plot for Component Criterion



Additional PCA's were conducted to review these structures. After considering the theoretical frameworks of successful psychopathy (e.g., Lilienfeld et al., 2015; Wallace et al., 2022) and suggestions made by the academic expert raters, the 5-component structure was selected with a further 9 items being removed due to cross-loading (difference score $< .1$). The finalised pilot scale consisted of 51-items with a 5-component structure labelled: Risk-taking, Self-Regulation, Social Potency, Stress-immunity, and CU traits. Table 4.1 shows the rotated factor loadings and inter-component correlations are presented in Table 4.2. As can be seen, each of the subscales positively correlated with the SPS Total.

Table 4.1
Results from a Factor Analysis of the Pilot SPS

SPS item	Factor loading				
	1	2	3	4	5
Factor 1: Risk-taking					
I pride myself on my ability to make split-second decisions	.68				
I don't like making decisions	.68				
I would not like a job where you are responsible for making lots of split-second decisions (R)	.65				
I am good at seizing unexpected opportunities when you have to act fast or lose your chance	.60				
I make quick and solid decisions	.59				
I enjoy games and activities where you have to make lots of split-second decisions	.56				
I can handle high pressure situations	.56				
I feel flustered when I have to make my mind up quickly (R)	.56				
I am not a fast-paced person (R)	.55				
I will often take risks	.50				
If something I want seems out of my reach, I will not bother trying to get it	.50				
I initiate tasks	.47				
I refrain from dangerous or risky situations (R)	.43				
I can take in a lot of information without being overwhelmed	.42				
I am skilled at lots of things	.41				
Dangerous situations excite me	.40				
I get things done right away	.39				
Factor 2: Self-regulation					
I put in the effort to get things I want		.74			
I am responsible for fixing my own problems		.70			
I do not invest much time and effort into my tasks (R)		.68			
I like to make sure I am prepared		.65			
I often struggle to see things from the point of view of others		.61			
People often feel insulted when I talk to them		.59			
I will try to avoid unnecessary arguments		.57			
I enjoy a heated argument		.54			
I take my time to get the work done		.52			
Everybody deserves respect (R)		.50			
I rarely feel sorry for people who are having problems		.44			
I care about others' opinions		.43			
I dislike "deep chats" with people		.42			
I will not follow instructions I do not agree with		.32			
Factor 3: Social Potency					
I am good at keeping conversations flowing			.68		
I have the ability to get people out of their shells			.68		
I am skilled at making people feel good			.62		
I am skilled at interacting with other people			.59		
I do not struggle getting people to see my point of view			.53		
I know how to get people to do what I want			.52		
When I argue I am good at getting my point across and convincing others			.47		
I can often get people to do things they would not do for others			.44		
I quickly become comfortable in the presence of others			.43		
Factor 4: Stress-immunity					
I often feel anxious (R)				.70	
I get nervous easily (R)				.61	
The little things rarely bother me				.57	
I feel very comfortable with who I am as a person				.56	
I find it easy to relax				.55	
When things don't go my way, I bounce back quickly				.47	
Factor 5: CU traits					

I am quite cold-hearted	.56
I will always seek revenge	.56
People apply far too much meaning to things	.56
I will do almost anything to get what I want	.43
I sometimes bend the rules	.40

Table 4.2*Inter-correlations between SPS subscales*

Variables	1	2	3	4	5	6	α
1.SPS total	-						.87
2.Risk Taking	.89**	-					.89
3.Self-Regulation	.29**	.18**	-				.84
4.Social Potency	.76**	.57**	.19**	-			.81
5.Stress Immunity	.67**	.51**	.24**	.45**	-		.76
6. CU Traits	.40**	.19**	.20**	.17*	.18**	-	.63

Note. * $p < .05$, ** $p < .001$

Descriptive Statistics

Descriptive statistics for the SPS and all validation measures (total scale and subscale scores) for the whole sample and broken down by sex can be found in Table 4.3. As can be seen, males scored higher both psychopathy measures included within this study. This is consistent with previous literature demonstrating males typically accumulate higher scores on measures of psychopathy (Forth et al., 1996). Moreover, males scored higher on each element of political skill, apart from sincerity, which is supported by previous research (Snell et al., 2013) suggesting that females in positions of leadership need to appear more sincere to be taken seriously when compared to their male counterparts.

Table 4.3*Descriptive Statistics for Study 1 Psychometrics*

Variable	<i>n</i>	Mean (SD)	Males M (SD)	Females M (SD)	<i>t</i>-tests	α
Age	208	23.90 (7.82)	27.82 (9.49)	23.13 (7.23)	3.30**	
SPS Total	208	143.39 (23.32)	160.94 (22.48)	139.80 (21.95)	.96**	.90
SPS Risk-Taking	208	51.24 (10.82)	57.05 (9.81)	50.06 (10.70)	.53**	.87
SPS Self-Regulation	208	30.91 (8.57)	36.62 (10.12)	29.75 (7.78)	.07**	.84
SPS Social Potency	208	30.34 (5.63)	31.48 (4.79)	30.08 (5.78)	1.34**	.80
SPS Stress Immunity	208	17.41 (4.72)	19.60 (5.16)	16.98 (4.53)	3.03*	.77
SPS CU Traits	208	13.47 (3.46)	16.17 (3.12)	12.91 (3.28)	5.39**	.63
TriPM Total	195	63.77 (19.71)	83.66 (16.03)	60.03 (18.11)	6.68**	.82
TriPM Boldness	195	30.95 (9.56)	37.50 (7.87)	29.72 (9.39)	4.26**	.80
TriPM Meanness	195	15.06 (9.64)	23.80 (9.14)	13.41 (8.86)	5.87**	.77
TriPM Disinhibition	195	17.75 (8.83)	22.36 (9.14)	16.89 (8.56)	3.18*	.74
PSI Total	195	5.14 (.78)	5.02 (.88)	5.16 (.77)	-.089	.89
PSI Networking	195	26.90 (6.93)	4.57 (1.46)	4.56 (1.11)	.03	.80
PSI Interpersonal	195	21.43 (3.75)	5.05 (.99)	5.32 (.97)	-.71	.85
PSI Social	195	26.21 (4.39)	5.04 (1.08)	5.19 (.86)	-.43	.78
PSI Sincerity	195	17.63 (2.57)	5.59 (.94)	5.84 (.88)	-1.13	.76
WRP Individual	195	34.91 (5.05)	34.97 (5.13)	34.90 (5.50)	.07	.81
WRP Team	195	32.52 (5.58)	32.74 (6.06)	32.49 (5.50)	.23	.79
WRP Organisation	195	29.89 (6.14)	30.77 (6.30)	29.74 (6.12)	.90	.81

Note. * $p < .05$, ** $p < .001$

Convergent and Divergent Validity with TriPM

Pearson correlations of SPS total and subscales with all validation measures can be seen in Table 4. In terms of Convergent and divergent validity, it was expected that the SPS would be positively correlated with the TriPM scales, specifically Boldness and Meanness. As can be seen, the SPS total was positively associated with all the TriPM scales, most strongly with Boldness ($r = .574, p < .01$). The main associations of the subscales varied, such that Risk Taking, Social Potency and Stress Immunity were most strongly linked to Boldness, Self-regulation to Meanness and Disinhibition, and CU traits to Meanness as expected.

Two-step linear hierarchical regressions were conducted, with sex and age (Step 1) and successful psychopathy (Step 2) to predict scores on the TriPM total and its subscales. Regression statistics are presented in Table 7. Results show that the SPS was a significant positive predictor of all components within the TriPM, specifically Boldness, which supports previous literature indicating boldness as a key associate of successful psychopathy (Du & Templer, 2021; Lilienfeld et al., 2018; Patrick et al., 2009; Persson & Lilienfeld, 2019).

Table 4.4*Correlations of the SPS total and subscales with all validation measures*

Variable	SPS Total	SPS Risk- Taking	SPS Self- regulation	SPS Social Potency	SPS Stress immunity	SPS CU traits
TriPM Total	.54**	.32**	.61**	.25**	.14**	.52**
Boldness	.57**	.60**	.05	.47**	.47**	.09
Meanness	.35**	.09	.67**	.00	-.00	.61**
Disinhibition	.20**	-.02	.57**	.05	-.17	.39**
PSI Total	.22**	.31**	-.25**	.57**	.19**	-.00
Networking	.42**	.38**	.01	.52**	.33**	.07
Interpersonal	.05	.17**	-.37**	.49**	.07	-.13*
Social	.01	.23**	-.30**	.51**	.06	-.07
Sincerity	-.02	-.00	-.52**	.04	-.01	-.22**
WRP Total	.19**	.35**	-.30**	.27**	.26**	-.20**
WRP Individual	.02	.25**	-.31**	.01	.01	-.22**
WRP Team	.19**	.34**	-.19**	.33*	.22**	-.14*
WRP Organisation	.14*	.25**	-.15*	.28**	.01	-.00

Note. * $p < .05$, ** $p < .01$

Table 4.5*Hierarchical Regressions Predicting Scores on the TriPM*

Outcome measure		R	R²	R² Change	B	SE	β	t
TriPM Total	<i>Step 1</i>	.409	.168					
	Age				.070	.170	.028	.413
	Sex				-20.6	3.47	-.402	-5.94
	<i>Step 2</i>	.595	.354	.186				
	Age				.023	.151	.009	.879
	Sex				-13.14	3.23	-.256	-4.06**
	SP				.386	.052	.457	7.41**

Note. SP = successful psychopathy. Statistical significance: * $p < .05$; ** $p < .01$; *** $p < .001$

Concurrent Validity

The zero-order correlations of the SPS subscales with the PSI can be viewed in Table 4.4. As expected, the SPS total was positively correlated with most domains of the PSI; specifically, PSI total, PSI Networking, PSI Interpersonal influence, and PSI Social astuteness but negatively with PSI Apparent sincerity.

Further hierarchal regressions were conducted, with sex and age (Step 1) and successful psychopathy (Step 2) to predict scores on the Political Skills Inventory. Results demonstrated that the SPS was a significant positive predictor of political skill, supporting previous literature which demonstrated the ability of individuals with high psychopathic traits to be both drawn to and exceed at roles requiring this skillset (Shütte, 2015).

For Work Role Performance (WRP), it was expected that the SPS would be positively correlated with individual, but negatively with team performance indicators. SPS was positively associated with WRP total ($r = .190, p < .001$), WRP team ($r = .199, p = .01$), and WRP Organisation ($r = .149, p = .05$), and not significantly associated with WRP Individual ($r = .02, p = .24$). This finding proved interesting due to the previous literature being divisive on whether individuals with high psychopathic traits work better alone, or whether their interpersonal skills allow them to succeed in team or organisation setting, this has never been looked at within the successful psychopathy construct previously.

Table 4.6

Hierarchical Regressions Predicting Scores on the PSI

Outcome measure		<i>R</i>	<i>R</i> ²	<i>R</i> ² Change	<i>B</i>	<i>SE</i>	β	<i>t</i>
PSI	Step 1	.104	.011					
	Age				-.008	.007	-.076	-1.03
	Sex				.115	.152	.056	.755
	Step 2	.364	.133					
	Age				-.009	.007	-.092	-1.32
	Sex				.359	.150	.174	2.38
	SP				.013	.002	.370	5.17***

Note. SP = Successful psychopathy. Statistical significance: * $p < .05$; ** $p < .01$; *** $p < .001$

Discussion Study 1

The initial findings from this pilot study demonstrated viability for the construct of successful psychopathy with the pilot scale being a 51-item scale consisting of 5-components, namely (i) risk taking encompassing impulsivity and decision-making, (ii) self-regulation encompassing self-belief, willpower, and achievement striving, (iii) social potency encompassing social adeptness and the ability to charm others and create bonds, (iv) stress immunity encompassing an individual's level of resilience and lack of internalisation, and (v) CU traits encompassing what are often considered the core traits of psychopathy (e.g., callousness, low empathy, shallow affect). The SPS was positively associated with all components of the TriPM (Boldness, Meanness, and Disinhibition) demonstrating concurrent validity, as well as being positively associated with the Political Skills Inventory and Work Role Performance (Team), supporting the predictive validity of the scale when applied to outcomes of professional success. The pilot study was useful for identifying the initial items appropriate for a psychometric scale of this nature, and to test whether the scale would perform as expected in a general population sample.

Nevertheless, following the responses from the expert raters, it was concluded that there was a need for further item development to cover additional aspects highlighted. For example, expert raters suggested the scale needed to demonstrate fewer conscientiousness and neuroticism related items and more items based on motivation and drive. Moreover, the CU traits subscale, whilst psychometrically sound, did not fully demonstrate the depth and core of psychopathy as 5-items were considered too few for such an important facet and core component of psychopathy (Crego & Widiger., 2022; Dinic et al., 2021). Therefore, the scale underwent further item pool generation used the previously applied strategies.

Overall, this demonstrated that successful psychopathy was a significant positive predictor of political skill, as supported by previous research (e.g., Bass & Avolio, 1997),

with subtle differences between males and females. With regard to work performance, this study showed a lack of a positive predictive relationship between successful psychopathy and individual workplace performance, and a significant positive predictive relationship between successful psychopathy and team workplace performance. This could be perceived as unusual as previous literature suggests individuals with prototypical psychopathic traits tend to be poor at teamwork and better working alone, however it also states that individuals with high psychopathic traits are master manipulators and tend to “be-friend” colleagues in order to help them attain their own goals (Babiak & Hare, 2006). This potentially could be a more prominent feature within the successful psychopathy subtype when compared to its prototypical construct, and warrants further investigation into workplace performance, employee/employer relationships, and tactical behaviour.

Study 2 - Further Development and Validation of the SPS Scales

Once again Deductive Rational Strategy (Burisch, 1974) was applied to identify further items from the existing theoretical constructs, which refer to the presence of additional CU traits and more prototypical psychopathic traits that would be beneficial to the adaptive outcomes of successful psychopathy, in addition to increasing items on drive, confidence, and motivation. Furthermore, some problematic items were identified as potentially removable, and this was taken into account during reliability and factorial testing. In addition, the construction of scale was re-evaluated using Classic Test Theory (CTT) and Rasch analysis to develop the finalised version and a short form of the scale.

For validation purposes, a cross-sectional design was used to investigate the concurrent and predictive validity of the scale in terms of measures of psychopathy, professional success, and expectancy for success. It was expected that the SPS would be most strongly associated with increased Boldness and Meanness (TriPM; Patrick, 2010), all facets

of political skill, status, and wealth factors of the life success measure, and expectancy for success.

Method

Participants

A total of 400 participants (50% females, $M_{age} = 34$, $SD = 13$, age range = 18-73 years) were recruited via the *Prolific* participant recruitment website, a crowdsourcing platform considered to yield data of equal quality to that derived from online or laboratory recruitment (Peer et al., 2017). The sample size exceeds the optimal sample size estimates for Rasch analysis (Linacre, 1994) as well as the suggested sample size for an EFA (Tabachnick & Fidell, 2013). Inclusion criteria stated that participants needed to be fluent in English, over 18 years of age and from the UK. Participants provided written informed consent in accordance with central University research protocols and national ethical guidelines. All participants who completed the survey were reimbursed for their time of around £5.50 per hour.

Procedure

To develop an initial understanding of the successful psychopathy construct and advance upon the pilot data, Deductive Rational Strategy (Burisch, 1984) was further applied based on theoretical understanding, and additional items with further core psychopathic traits were added to the existing item pool. The final item list consisted of 100 items scored on a scale from 1 (Strongly Disagree) to 5 (Strongly Agree).

Measures for Convergent and Concurrent Validity

The Triarchic Psychopathy Measure (TriPM; Patrick et al., 2010) and *Political Skills Inventory* (PSI; Ferris et al., 2005) as described within the pilot study were also included within study 2.

Data Analyses

Initially reliability analyses using item-total statistics were conducted to ensure unidimensionality. Following this, an EFA was conducted to identify the structure of the SPS inventory using SPSS Version 25. Once the factor structure had been determined, items were then subjected to Rasch analysis using the software RUMM2030 (Andrich et al., 2009). The purpose of Rasch analysis was to establish internal validity of the SPS by identifying the most suitable items for inclusion in the scale and its short version based on their measurement properties and development of ordinal-to-interval conversion tables to increase precision of measurement. Once the structure of the scale was psychometrically sound, descriptive statistics and Pearson's correlations were conducted to assess the convergent and concurrent validity of the scale using existing measures of psychopathy, professional success, expectancy of life success, and the importance of success domains.

Rasch Analysis

Rasch analysis can be useful as a robust measurement approach due to several advantages it has over CTT methodologies such as EFA and CFA. Initially, Rasch methodology bypasses some of the limitations associated with CTT such as the lack of control over the difficulty level of items. For example, CTT relies on a sum score calculated of all the items, however, items may represent different amounts of information about the construct under investigation, and as such they should not be considered as equal contributors to the total score (Stucki et al., 1996). This limitation of CTT is also demonstrated by the

difference in loadings of individual items to a construct or factor, suggesting they contribute differing values to the overall construct or latent trait undergoing measurement. Rasch analysis can also include an illustrated person-item threshold map, which is often displayed graphically to show how well the range of item difficulties cover the abilities or qualities within a sample (Tennant & Conaghan, 2007).

Rasch analysis further shows its advantages over CTT by incorporating Differential Item Functioning (DIF). DIF is observed when participants with the same level on a latent trait (i.e., successful psychopathy), but from different groups such as male and female, respond in a different manner to an item. This bias can be identified as consistent or non-consistent across a trait, and Rasch analysis can employ scale modifications to correct for consistent bias, whereas non-consistent items are generally candidates for removal from the scale (Kersten & Kayes, 2011). Additionally, Rasch analysis enables precise measurements of individuals at all levels of the scale including extremes (Hobart & Cano, 2009), which is particularly relevant to a construct such as successful psychopathy where the researchers are interested in the extreme levels of psychopathic traits.

Rasch analysis explores several parameters (e.g., local independence assumptions), item bias, unidimensionality, and the appropriate ordering of item and response options (Kersten & Kayes, 2011). When the Rasch model fit has been attained, these parameters satisfy the model conditions and the participants are ordered according to their level of ability when responding to a scale measuring a latent trait (e.g., successful psychopathy), and the items then can be classified by the level of difficulty assessed by a particular item.

Initially, Rasch analysis evaluates the overall fit of the data to the Rasch model, which is then proceeded by screening of individual items and assessing of residual correlations between items that could impact the overall model fit due to local dependency or DIF. The overall Rasch model criteria include non-significant item-trait interaction as calculated by chi

square ($p > .05$); the individual item fit residuals within the range of -2.50 and +2.5; residual correlations between items ($< .20$; Christensen et al., 2016); and no Differential item functioning (DIF) due to demographic factors (e.g., age, sex). The person separation index (PSI) is employed in Rasch analysis to evaluate reliability. This estimates the ability of the scale to discriminate between persons with differing trait levels (e.g., successful psychopathy). PSI of $> .70$ is considered as acceptable for assessment of groups and $> .80$ for assessment of individuals (Fisher, 1992).

To achieve the best model fit, Rasch analysis requires an iterative method of adjusting and evaluating psychometric properties. Earlier Rasch studies had tended to exclude misfitting items to achieve a satisfactory model fit, which may impact a scale's construct validity. Thus, deleting misfitting items was considered as a last resort and I primarily employed a novel approach that involved creating super-items by combining locally dependent items into a single super-item, which decreases measurement error and improves fit to the Rasch model without compromising construct validity (Lundgren-Nilsson et al., 2013; Medvedev et al., 2018).

The Rasch technique examines the measure's unidimensionality using principal component analysis (PCA) of the residuals and t -tests (Smith Jr, 2002). When comparing person estimates for the set of items with high loadings and the set of items with low loadings on the initial principal component of residuals, unidimensionality requires less than 5% of significant t -tests in comparison. If the lower bound of the confidence interval calculated for the number of relevant t -tests overlaps 5%, unidimensionality is also verified. When the Rasch model's criteria are met, the distribution of the person-item thresholds is analysed to see how well the scale's item thresholds cover the sample's trait levels. Finally, using Rasch model estimates, an ordinal-to-interval transformation table can be developed, allowing for the conversion of ordinal scale scores into interval level data to improve assessment accuracy.

Statistical significance was determined by applying the traditional cut-off point of p -value $> .05$.

Results

Descriptives

Descriptive statistics for Study 2 can be seen in Table 4.7 below.

Table 4.7

Descriptives for Study 2 across all variables

Variables	Males M (<i>SD</i>)	Females M (<i>SD</i>)	p	α
Age	34.18 (13.52)	33.94 (12.17)	.84	-
SPS	159.21 (19.64)	154.27 (18.68)	$< .01$	.84
TriPM	62.10 (17.04)	52.51 (16.90)	$< .001$	.88
PSI	4.76 (1.00)	4.97 (.92)	.02	.93
GESS	102.65 (17.03)	106.06 (17.47)	.04	.93

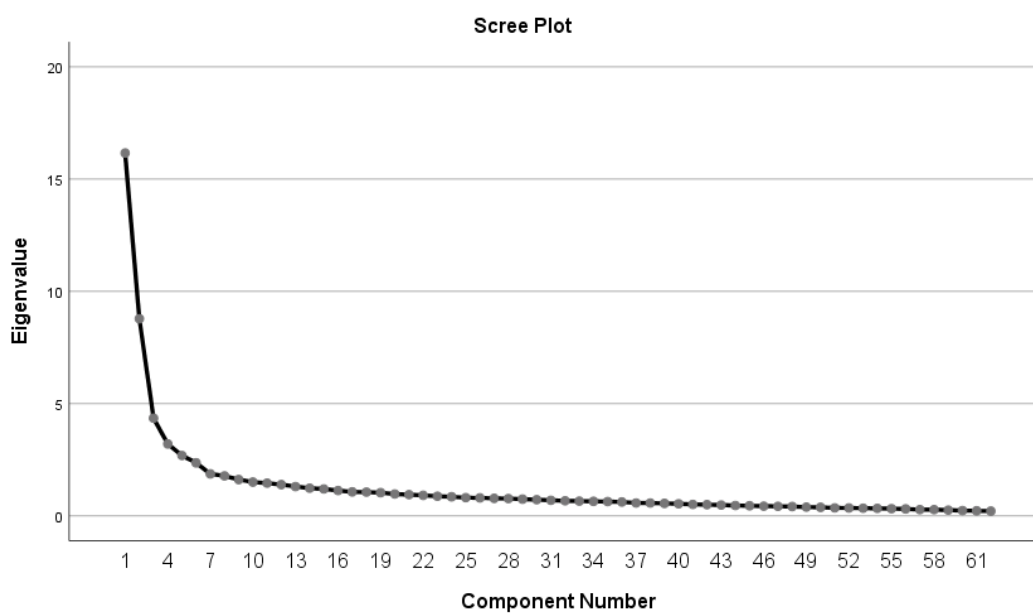
Exploratory Factor Analysis

The 100 items of the SPS were subjected to a Principal Component Analysis (PCA). The Kaiser-Meyer-Olkin (KMO) measured the sampling adequacy at .90, which is above the recommended value of .60 (Kaiser, 1970). Bartlett's test of Sphericity reached statistical significance, supporting the factorability of the correlation matrix ($p < .05$). The items initially underwent reliability analyses, specifically examining the Item-total statistics. This process was conducted to identify poor item-total correlations (i.e., $> .2$). Based on this initial item screening 12 items were removed at this stage leaving the scale at 88-items before

EFA. Based on the single component structure, conceptually the ideal model fit was either a 4, 5 or 6 factor solution, which was supported by the scree plot and the K1 rule (Figure 4.2). Three PCA's were conducted to review these rotated structures and the 6-component structure was identified as being the most theoretically and psychometrically sound solution. A further 29 items were removed due to cross-loadings (with difference between loadings being $< .1$) and conceptual criteria. The preliminary scale at this stage consisted of a 6-component structure and included 62-items.

Figure 4.2

Scree Plot Component Criterion



Rasch Analysis of the SPS full version

The 62 items were analysed through the process of iterative Rasch analysis. Prior to analysis, a likelihood-ratio test was used to determine the most appropriate Rasch model for the current data and supported the unrestricted Partial Credit model as the only suitable model due to significant differences between thresholds across individual SPS items ($\chi^2(173) =$

699.52, $p < .001$). Table 4.8 includes the overall Rasch model fit parameters of the initial and final analyses of the SPS. The first analysis (A1) indicated good reliability of the scale but the overall fit to the Rasch model was inadequate as evidenced by significant item-trait interaction ($p < .001$) reflecting deviation from the fundamental principles of measurement defined by the model (e.g., equal measurement units across different trait levels).

There was no evidence for unidimensionality, but the scale showed good sample targeting with the person mean closely approaching the item mean. Table 4.9 presents individual items fit statistics of the Rasch model including item location, fit residual, and chi-square for all 62 items entered into the initial Rasch analysis. There were 13 misfitting items that had either extreme fit residual, significant chi square or both. As removing too many items may affect construct validity of a measure, only 8 misfitting items were selected and removed by considering both magnitude of misfit and conceptual importance. After removing misfitting items the overall fit improved but item-trait interaction was still significant and no evidence of unidimensionality was obtained (Tables 4.8 and 4.9).

Table 4.8

Summary of Rasch model fit statistics for the initial and the final Rasch analyses of the SPS (N = 403)

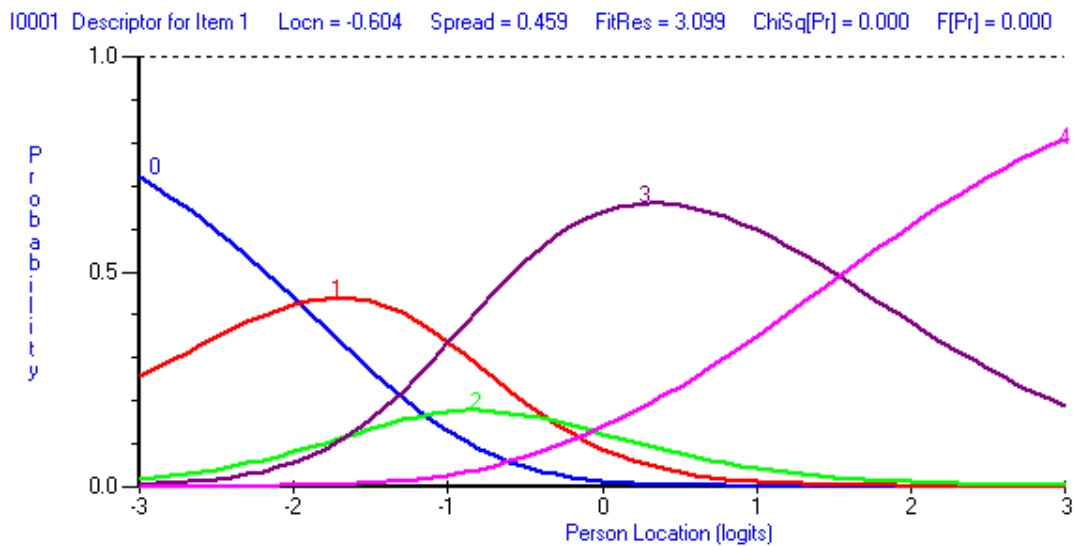
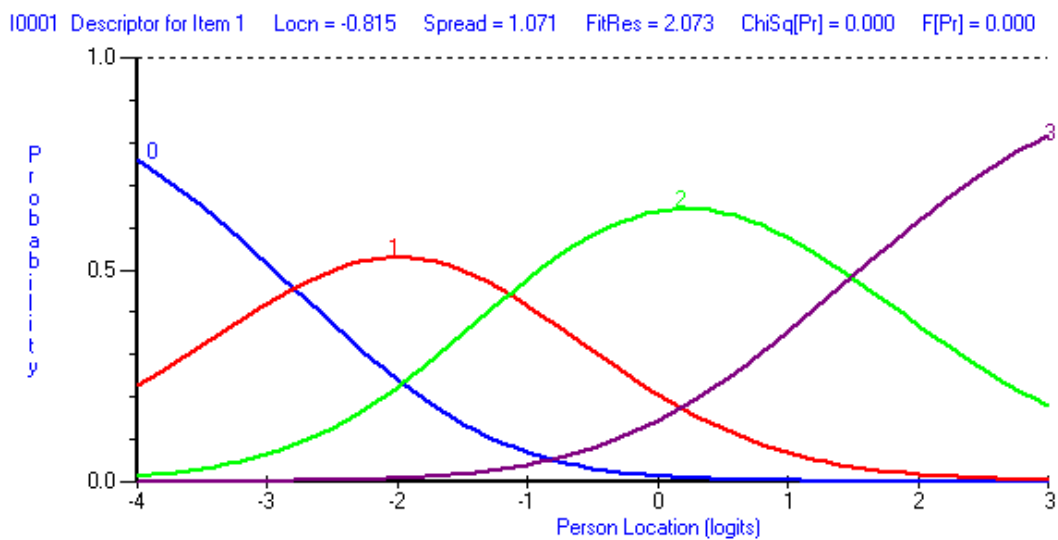
Analyses	Person mean		Goodness of fit		PSI	Unidimensionality <i>t</i> -tests	
	Value	SD	χ^2 (df)	<i>p</i>		%	Lower bound %
A1 Initial (62 Items)	-0.19	0.49	997.99(531)	< .001	.93	>10	>5 (NO)
A2 (54 Items)	-0.21	0.50	860.81(486)	< .001	.93	>10	>5 (NO)
Final (5 Superitems)	-0.09	0.29	51.20 (45)	.240	.82	5.7	3.6 (YES)
Short Version							
Initial (30 Items)	-0.23	0.50	467.95(270)	< .001	.87	>10	>5 (NO)
Final (5 Superitems)	-0.18	0.37	32.28(45)	.922	.73	3.7	1.6 (YES)

Table 4.9
Initial Rasch model fit statistics for individual items

No	Item Description	Location	Fit Resid	Chi Sq
1	I am quite cold-hearted	-0.60	3.10*	39.74
2	I can often be arrogant	-0.47	0.26	3.61
3	I don't care about how others are feeling	-0.60	-1.25	7.08
4	I don't care if someone gets hurt so I can get what I want	0.13	0.18	3.37
5	I don't tend to feel guilty if I hurt someone's feelings	0.33	1.98	20.99
6	I will always seek revenge	0.47	2.53	13.22
7	People often feel insulted when I talk to them	0.52	2.73*	17.51
8	I can be snobbish at times	0.20	-2.36	22.40*
9	I tend to be egotistical	-0.56	0.80	6.82
10	I rarely feel sorry for people who are having problems	-0.16	-0.36	8.51
11	Playing to win is more important than playing fair	0.43	-0.69	5.42
12	I would "walk over someone's dead body" to get what I want	0.01	0.04	0.99
13	I don't mind getting punished, as long as I get what I want	-0.05	2.84*	3.46
14	An act is only illegal if you get caught doing it	-0.39	-0.53	8.53
15	When things go my way, I tend to be smug about it	0.63	2.74*	17.39
16	I am better than other people	-0.29	-0.38	10.96
17	I have the ability to get people out of their shells	0.54	1.38	6.06
18	I am skilled in interacting with other people	0.25	-1.51	18.41
19	I am good at keeping conversations flowing	-0.15	-0.64	2.06
20	I am skilled at making people feel good	0.16	3.28*	21.58
21	I can use my emotional skills to change how another person is feeling	0.17	1.89	3.94
22	I know how to get people to do what I want	-0.22	0.72	5.00
23	In groups I am a part of, I am usually the leader	-0.50	1.29	10.92
24	I do not struggle getting people to see my point of view	-0.16	0.47	1.46
25	I quickly become comfortable in the presence of others	-0.50	0.53	5.64
26	I am confident speaking my mind	0.37	-1.36	11.33
27	I can often get people to do things they would not do for others	0.82	2.00	15.76
28	When I argue I am good at getting my point across and convincing others	-0.53	-1.09	8.01
29	When I upset someone, I just use my charm to get them back onside	0.24	-1.00	12.17
30	I feel I have achieved a lot	-0.91	3.49*	42.70*
31	I am usually productive	-0.20	-0.74	10.34
32	I am successful in life	0.65	2.03	23.25*
33	I put in the effort to get the things I want	-0.55	-0.22	4.74
34	I am skilled at lots of things	0.36	4.27*	5.68
35	I can handle high pressure situations	0.61	-0.10	1.60
36	I get things done right away	-0.48	-0.12	5.60
37	I can take in a lot of information without being overwhelmed	0.91	0.17	2.32
38	I know and value my own self-worth	-0.26	0.67	2.18
39	I refrain from dangerous or risky situations	0.37	1.53	1.76
40	Dangerous situations excite me	0.40	-0.41	10.50
41	I will often take risks	-1.04	0.92	1.66
42	I would not like a job where you are responsible for making lots of split-second decisions	-0.82	2.04	9.17
43	My fear of the unknown prevents me from trying new things	0.91	0.31	3.51
44	I pride myself on my ability to make split-second decisions	0.52	0.15	4.56
45	I am not a fast-paced person	0.49	-0.36	6.69
46	I enjoy games and activities where you have to make lots of split-second decisions	0.03	-1.69	24.64*

47	I feel flustered when I have to make my mind up quickly	-0.57	-1.29	23.19*
48	I don't like making decisions	0.22	6.89*	31.88*
49	I find it easy to relax	-0.26	1.80	8.22
50	I often feel anxious	-0.21	0.88	1.02
51	The little things rarely bother me	0.07	0.37	4.34
52	I get nervous easily	-0.44	1.59	5.38
53	When something bad happens, I get over it relatively quickly	-0.37	-2.29	30.97*
54	I can usually control my emotions, so they don't interfere with me reaching my goals	0.04	-2.74*	40.03*
55	When things don't go my way, I bounce back quickly	0.73	1.69	12.27
56	I am good at controlling my emotions	0.48	1.01	13.49
57	I will do almost anything to get what I want	-0.30	-1.11	9.85
58	If I can get away with something, then it must be right	-0.20	0.05	3.62
59	I am motivated by financial gains	-0.07	-2.59*	29.71*
60	The potential for social power keeps me going	0.19	0.46	0.97
61	I prefer tasks that offer immediate rewards	-0.49	1.68	6.72
62	Gaining success can be tough; it's all about survival of the fittest	0.11	-0.74	7.00

At this stage individual items thresholds were examined, which were disordered for the majority of the SPS items. A typical item showing disordered threshold for response category 2 is displayed in Figure 4.3a, indicating that the probability to choose response option 3 after option 1 is higher than to choose response option 2 after 1. Visual analysis showed that the thresholds were disordered in the same way across other SPS items, therefore, the response categories were uniformly rescored for all 54 items by collapsing response categories 1 and 2. Thresholds were perfectly ordered after this modification as evidenced by Figure 4.3b showing the same item (1) after rescoring. The overall model fit further improved after this modification, but the chi-square was still significant ($\chi^2(486) = 794.80, p < .001$) and unidimensionality was not confirmed.

Figure 4.3a.*Disordered Individual Item Threshold***Figure 4.3b.***Ordered Individual Item Thresholds*

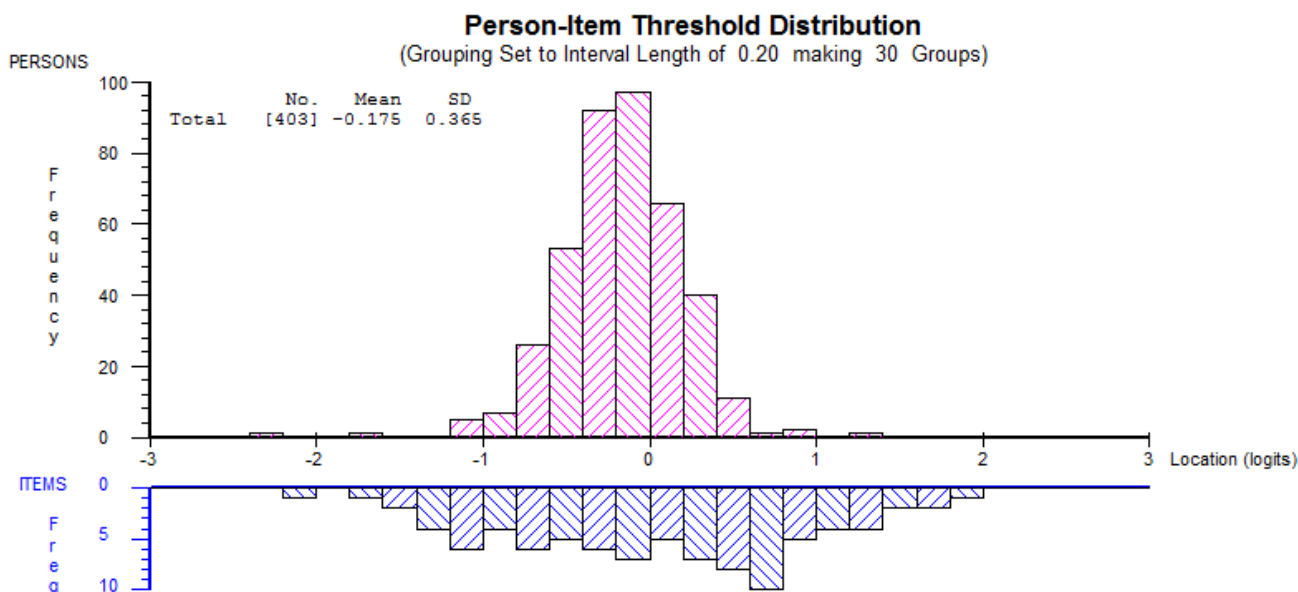
As the Rasch model fit and dimensionality may be affected by residual correlations between individual items that can create local dependency if exceeding the magnitude of 0.20, the residual correlation matrix was examined. Residual correlations were found between six groups of items that reflected the factor structure derived by the EFA and these items

were combined into six super-items to resolve local dependency issue. After this modification there was a noticeable improvement of the overall model fit with almost excellent sample targeting but the chi square was still significant ($\chi^2(54) = 155.22, p < .001$) and there was further local dependency between super-items 1 and 2. To resolve this, super items 1 and 2 were combined into one super item, which resulted in the best Rasch model fit, strict unidimensionality and good reliability (Table 4.8, final). No significant DIF was observed confirming scale invariance across sex and age.

Therefore, the psychometric condition necessary for producing ordinal-to-interval conversion tables was satisfied. Figure 4.4 shows person-item threshold distribution plot of the final analysis demonstrating that item thresholds perfectly cover the sample levels of successful psychopathy trait. It can be seen that the sample mean is similar to item mean and person distribution is positively skewed suggesting that while the SPS has ability to measure

Figure 4.4.

Person-Item Threshold Distribution of the Final Analysis.



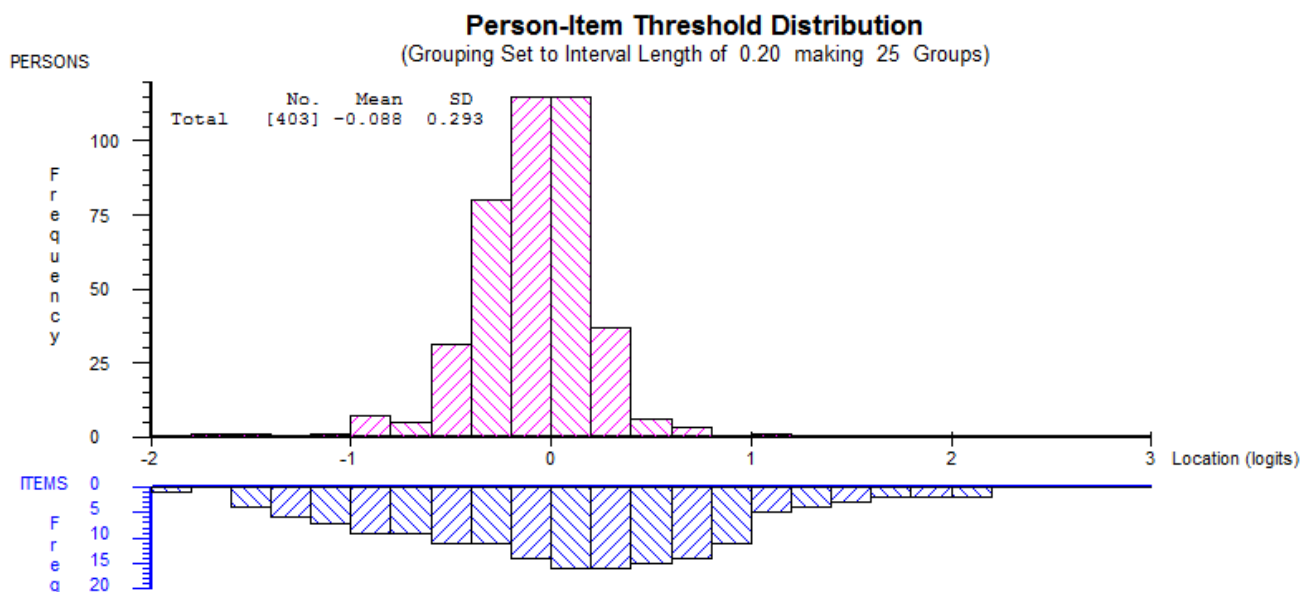
high trait levels outside of this sample distribution, individuals with high levels of successful psychopathy trait may be underrepresented in the current sample.

After conducting Rasch analyses, items were identified to form a short form (SPS-SF). Results are presented in Table 4.8. The SPS-SF included 30-items that were selected based on both magnitude of factors loadings and conceptual importance to each construct.

These items were subjected to Rasch analysis. We replicated the same strategy of rescoreing items used for the 54-item version by combining items into super items to resolve local dependency issues and achieved the best model fit (Table 4.8). Figure 4.5 shows that item thresholds perfectly cover the sample levels of successful psychopathy without noticeable ceiling or floor effects. Additionally, in regard to sample targeting, the SF has similar coverage to the full version of the scale.

Figure 4.5

Person-Item Threshold Distribution of the Final 30-Item SPS Analysis.



Reliability and Inter-Item Correlations

The SPS showed high reliability for the total scale ($\alpha = .84$) and the subscales; CU traits ($\alpha = .87$), Social Potency ($\alpha = .90$), Confidence ($\alpha = .82$), Risk Taking ($\alpha = .82$) and Stress Immunity ($\alpha = .86$). The final subscale of Manipulation demonstrated good reliability ($\alpha = .66$). The intercorrelations among the 6 SPS facets are shown in Table 4.10. All subscales moderately to strongly correlated with the SPS total score.

Table 4.10

Inter-Item Correlations of the SPS

Variable	1	2	3	4	5	6
1. SPS Total	-					
2. SPS Core	.610**	-				
3. SPS Social Potency	.696**	.068	-			
4. SPS Confidence	.588**	-.048	.562**	-		

5. SPS Risk Taking	.467**	.217**	.544**	.467**	-
6. SPS Stress Immunity	.530**	.202**	.397**	.464**	.486**
7. SPS Manipulation	.678**	.452**	.311**	.303**	.306**

Note. $p < .05^*$, $p < .01^{**}$, $p < .001^{***}$

Convergent & Concurrent Validity Analyses

The correlations between the SPS and TriPM, GESS, LSMS, and PSI can be found in Table 4.11. The SPS was strongly positively correlated with the TriPM total, Boldness and Meanness, and weakly correlated with Disinhibition, which is similar to the findings described in the pilot suggesting the finalised version of the scale demonstrates good convergent validity. Additionally, the SPS demonstrated a moderately positive correlation with the GESS total, indicating an expectation to be successful which maps onto successful psychopathic traits such as egocentrism (part of the core psychopathic traits component) and drive (part of the confidence component). As expected, the SPS was moderately positively associated with status seeking, and weakly positively associated with professional fulfilment and security seeking on the measures of life success. Furthermore, the SPS was negatively associated with family, personal fulfilment, and society however these associations were non-significant. Finally, the SPS demonstrated positively significant predictive validity on each of the variables.

Table 4.11

Correlations Between the Successful Psychopathy Scale and Study Variables

Variable	SPS Total	SPS CU	SPS Social Potency	SPS Confidence	SPS Risk-taking	SPS Stress- immunity	SPS Manipulation
TriPM Total	.611**	.697**	.404	.130**	.573**	.386**	.351**
Boldness	.567**	.148**	.699	.606**	.731**	.644**	.242**
Meanness	.452**	.803**	.042	-.087	.278**	.233**	.293**
Disinhibition	.231**	.489**	.078	-.264	.159**	-.094	.187**
PSI Total	.500**	-.091	.717**	.571**	.451**	.320**	.322**
Networking	.509**	.097	.566**	.492**	.424**	.284**	.371**
Interpersonal	.448**	-.150**	.715**	.523**	.382**	.330**	.221**
Social	.446**	-.051	.665**	.462**	.431**	.259**	.293**
Sincerity	-.064	-.490**	.211**	.272**	.032	.046	-.041
GESS Total	.403**	-.199**	.542**	.737**	.398**	.383**	.240**
LSMS Status	.486**	.416**	.274**	.157**	.274**	.134**	.535**
LSMS Society	-.022	-.323**	.191**	.206**	.133**	-.066	-.002
LSMS Family	-.067	-.347**	.128*	.150**	.036	-.104*	.013
LSMS Personal	-.027	-.311**	.139**	.182**	.028	.020	-.022
LSMS Professional	.153**	-.114*	.155**	.258**	.113*	.046	.275**
LSMS Security	.146**	-.034	.105*	.126*	.140**	.050	.335**

Note. * $p < .05$, ** $p < .01$

Discussion Study 2

The findings from Study 2 indicated excellent viability for the finalised 54-item SPS and 30-item SPS-SF. The SPS consists of 6 facets, namely core psychopathic traits, social potency, confidence, risk taking, stress immunity, and manipulation, each demonstrating good reliability and meeting the expectations of the Rasch measurement. The full 54-item scale was positively associated with two-components of the TriPM (Boldness and Meanness) as expected and the scale demonstrated positive associations with professional success as measured by the Political Skills Inventory (PSI; Ferris et al., 2005), an overall expectancy for success (GESS; Corcoran & Fisher, 2000; Fibel & Hale, 1978), and as suggested by previous literature (Boddy, 2006; Glen et al., 2017; Kries & Cooke, 2011), specifically, positive associations with seeking status and wealth.

General Discussion

This programme of research sought to develop and validate a novel psychometric measure for assessing successful psychopathy within the general population, and initially validate this newly developed measure using existing instruments for psychopathic traits, as well as investigate its predictive capabilities in relation to political skills, work performance and success. The long and short forms of this newly developed scale represent a novel and necessary advancement in the field of successful psychopathy. Previously, only one other attempt has been made within the field to develop an equivalent measure of successful psychopathy-related traits; however, this measurement (DAPTQ; Durand, 2019) focused largely on generalisable adaptive traits, which could be applicable to all individuals, not specifically “successful psychopaths”. Based on the current literature, the so-called “core psychopathic traits” were notably absent. Moreover, said scale featured 8-components which is less psychometrically desirable, was based solely on CTT to finalise the scale construction and did not have the robust support of Rasch.

The SPS demonstrates excellent reliability, internal consistency, and strict unidimensionality for measuring successful psychopathy within general population samples. The finalised measures (54-item and 30-item scales, respectively) met expectations of the Rasch measurement model which allowed for the production of conversion tables which can be employed to increase assessment accuracy by converting individual scores into interval-level data suitable for parametric tests which increases measurement precision. The measure showed no invariance across all demographic groups, with no significant Differential-item functioning (DIF). The 54-item scale demonstrated good concurrent and predictive validity across an existing psychopathy measure, measures of professional success, success expectancy and importance.

Overview of Findings

The most robust component identified within the SPS pilot study appeared to be risk taking, which is consistent with the research literature suggesting that the ability to take calculated risks is a key feature of successful psychopathy (e.g., Lilienfeld et al., 2012; Palman et al., 2020; Poythress & Hall, 2011). The Pearson's correlations and EFA indicated that the SPS may tap into the positive-adjustment traits associated with psychopathy, such as social potency (Cleckley, 1941/1976) and fearless dominance (Lilienfeld, 2005), which are prime features of the successful psychopathy construct as they enable the individual to form superficial relationships with others in order to get what they want, and additionally they are useful skills within professional environments to a certain extent (e.g., Babiak et al., 2006). Additionally, it supported the importance of affective psychopathic traits to the construct of successful psychopathy (Crego & Widiger, 2022). Furthermore, the SPS had high internal consistency and demonstrated construct validity. The SPS was also most strongly correlated with the TriPM Total, Boldness and Meanness subscales, demonstrating good concurrent validity. This is supported by similar findings in research on psychopathy and success (e.g.,

Pasion et al., 2016; Persson & Lilienfeld, 2019), which suggests that boldness or social potency is a key component of successful psychopathy. SPS scores accounted for a substantial portion of the variance in TriPM scores after controlling for sex and age.

The weaker associations of the SPS with TriPM Disinhibition scale further supports the divergent validity of the scale, demonstrating that Disinhibition does not map onto the adaptive or potentially successful outcomes of individuals with psychopathic traits. Furthermore, it suggests a potential key attribute of successful psychopathy in relation to inhibition and self-control (Lasko & Chester, 2020). TriPM Disinhibition encapsulates problematic impulsivity, boredom proneness, and irresponsibility, as well as antisocial behaviours such as theft or fraud (Patrick et al., 2006). Based on the current working definition of successful psychopathy, these would not be considered particularly adaptive or useful traits to promote success (Persson & Lilienfeld, 2019). Therefore, the weak associations between this facet and the SPS supports divergent validity given that the SPS is defined by its ability to measure adaptive psychopathic traits within the general population.

Predictive validity was also demonstrated as the SPS accounted for a substantial percent of the variance in political skills (when controlling for sex and age) in both studies. Additionally, the SPS demonstrated strong positive associations with three out of the four subscales of the PSI, namely networking, interpersonal skill and social skills, but was not associated with sincerity. This is supported by previously literature which suggests that some psychopathic traits could be profitable within a political environment (Dutton, 2016; Lilienfeld et al., 2012), as their callous yet charismatic presentation could aid them in succeeding in a political leadership role (Bass & Avolio, 1997; Palmen et al., 2018a; Palmen et al., 2020b), however, it is not clear how long this leadership position would last, unless they were able to feign sincerity (e.g., Boddy, 2006). These findings indicate that the SPS has a place within occupational domains.

The SPS demonstrated positive relationships with team performance and organisational performance. This is contradictory to previous notions that the prototypical psychopath typically does not thrive in teamwork situations, unless they are the leader (Babiak et al., 2010) and they rarely care about others within their organization (Boddy & Taplin, 2021). On the other hand, large organisations may appreciate the emotional control and stress immunity that these individuals bring along, which would be suitable for roles that require less employee relations and more challenging decision making and responsibility (Du & Templar, 2022). Within such roles, they may contribute to organisation as whole due to the lack of unnecessary socialisation and accommodation of their ego. Regardless, this indicates differences between prototypical psychopathy and successful psychopathy, which would warrant further investigation.

Overall, the most psychometrically robust component of the SPS were the core psychopathic traits (Crego & Widiger, 2022; Dinic et al., 2021), consisting of affective and interpersonal traits. Indeed, successful psychopathy should be characterised by these core traits associated with prototypical psychopathy, such as callousness, lack of empathy, and superficial charm, alongside moderating variables that create a “subtype” of individual with psychopathic traits (Lilienfeld et al., 2015). This viewpoint is also supported by existing theoretical models of successful psychopathy (Hall & Benning, 2006; Lilienfeld et al., 2015) and provides empirical data to validate findings of a recent systematic review (Wallace et al., 2022), which posited that the models in conjunction with one another presented the best argument for successful psychopathy. Thus, the Differential-configuration and Moderated-expression models demonstrate the importance of the overall construct including additional traits that buffer the core traits and prevent maladaptive behavioural outcomes. This also highlights the importance of identifying moderating factors, which can be structural, environmental, and contextual (Steinert et al., 2017).

Overall, the SPS performed well within these initial development and validation studies. The scale demonstrated strong positive correlations with an existing psychopathy measure, success expectancy, and professional performance measures. It was also highlighted that individuals who score high on the SPS place importance on status, wealth, and security more so than family or social relationships. This is important to note, as it suggests they are only “successful” within certain life domains but not others, and this requires further evidence.

Limitations and future directions

Although the findings of this study are encouraging, additional construct validation is needed to further assess the SPS and its sub-scales against other measures of psychopathic traits such as the PPI (Lilienfeld & Widows, 2005), the Levenson Self Report Psychopathy measure (LSRP; Levenson, 1995), and Self-Report Psychopathy (SRP-III; Paulhus et al., 2016) for concurrent validity. Typically test-retest correlations have been utilised to distinguish between state and trait components (Barnes et al., 2002) in the development of psychometric measures. However, this method cannot provide information on different variance sources (e.g., person, item, or interactions), solely focuses on total score correlations, and cannot be used to examine the relative strength of the items. Therefore, it is important future directions focus on employing Generalisability Theory (G-Theory), which is an enhanced technique for analysing data acquired using psychometric instruments. G-Theory demonstrates a major advancement over CTT, and this approach will be incorporated into future studies.

Furthermore, alongside measures of occupational success, early childhood and adult relationship experiences, and assessments of maladaptive outcomes such as antisocial behaviours and aggression should be incorporated to address the predictive and construct validity of the scale. Although some components of occupational success were included

within this initial study, further validation against alternative measures is recommended. Moreover, when comparing the SPS to the DAPTQ (Durand, 2019), we can identify a more psychometrically sound factor structure within the SPS. Additionally, the factors map more accurately onto current conceptualisations of successful psychopathy (Lilienfeld et al., 2014; Wallace et al., 2020). However, it is not possible to state with certainty that the SPS is a better indicator of successful psychopathy within general population samples at this point. Future studies should include the DAPTQ alongside the SPS to examine the relationship between the two measures, as well as any correlates.

In addition, whilst the Rasch model has merits over conventional methodology such as CFA (Rusch et al., 2017), it is important to note the limitations of the model, specifically in terms of the assumption of unidimensionality. The Rasch model has notable constraints in the setting of unidimensionality, such as the difficulty of applying it to sub-scales rather than the complete set (Pallant & Tennant, 2007), which could be problematic when assembling a theoretically multidimensional scale. This method may provide only a limited understanding of the subtle features of each sub-scale, thus oversimplifying the assessment of complicated constructs.

Alternative methodologies, such as such as Exploratory Structural Equation Modelling (ESEM), CFA, and Multidimensional Item Response Theory should be discussed. ESEM allows for the investigation of both the underlying structure and cross-loadings which is useful in cases where constructions do not strictly conform to unidimensionality (Alamer, 2022) and Confirmatory Factor Analysis (CFA) provides a strong framework for evaluating the fit of hypothesised multidimensional models which may be used to evaluate the presence of associated factors. However, because of its flexibility and less restrictive framework as compared to CFA, ESEM gives a superior fit to the data in practically all multidimensional research (for a review, see Morin et al., 2020). Furthermore, requiring conceptually related

factor loadings to be zero leads to biased estimate of the factor correlation (Marsh et al., 2014; 2020; Morin et al., 2013; Sánchez-Oliva et al., 2017). Factor correlations tend to be unbiased and appropriately reflect the data when cross-loadings are calculated, even if they are modest and non-significant (Marsh et al., 2014). For these reasons, the fit indices of ESEM and Rasch are often superior to those of CFA, indicating ESEM as the next logical step over CFA in further validating the scale.

Lastly, there is another potential model for future investigation, namely Multidimensional Item Response Theory (IRT), which captures the intricacies of multidimensional variables and allows for the modelling of interactions between latent qualities. Furthermore, as stated by Briggs and Wilson (2003), multidimensional Rasch models extend Rasch models to account for multidimensionality and Chalmers' (2012) work on the R package "mirt" provides a useful tool for building multidimensional IRT models which should be utilised in future studies. Therefore, future construct validation on the SPS should explore these methodological models.

Finally, whilst there are certain benefits to using item parcelling (referred to as super-items within this thesis) in statistical modelling (Little et al., 2013), there are important things to keep in mind. Parcelling has the advantage of simplifying complicated models by lowering the number of variables that need to be observed, which may enhance model fit (Matsunaga, 2008). This is particularly useful when working with small sample sizes or elaborate model architectures. Furthermore, parcelling can help with multicollinearity by grouping together highly linked data (Plummer, 2000). Nevertheless, there are a number of drawbacks to this strategy that should be carefully considered. Since item bundles are collections of objects with possibly varying contents, one significant concern is the possible loss of measurement specificity (Marsh et al., 2013). The subjectivity introduced by the arbitrary nature of parcelling procedures casts doubt on the reliability and repeatability of results.

Furthermore, it may not always be possible to assume local independence among elements within a parcel, and it might be difficult to assign changes in the model to particular components due to the difficulties in understanding parcels (Little et al., 2002). There is an additional degree of uncertainty in the technique since the success of item parcelling depends on the parcelling strategy selected.

Notwithstanding these factors, item parcelling has a positive effect on improving fit and simplifying models and has been generally positively accepted under certain conditions (e.g., Bagozzi & Edwards, 1998; Bandalos & Finney, 2001; Little et al., 2002; Marsh et al., 1998; Marsh & O'Neill, 1994; Sass & Smith, 2006; Sterba & MacCallum, 2010; Williams & O'Boyle, 2008). However, the potential issue with the method highlights the necessity for researchers to weigh the advantages of item parcelling against cautious methodological considerations and a clear, well-reasoned strategy in order to preserve the validity and reliability of their statistical models.

Conclusion

Overall, the SPS appears to be a promising new measurement for assessing successful psychopathy within general population samples. The SPS allows for a fine-tuned examination of the means in which individuals with core psychopathic traits can be adaptive by the existence of moderating protective factors, such as stress immunity. This instrument may encourage further examination into the successful psychopathy construct and ultimately shed light on the underlying structure of psychopathy and give weight to the investigation of individuals with high psychopathic traits in the absence of criminal or overtly antisocial behaviours.

Chapter 5. Concurrent Validity of The Successful Psychopathy Scale

Introduction

Chapter 4 focused on the development and validation of both the Successful Psychopathy Scale (SPS) and the Successful Psychopathy Scale Short-Form (SPS-SF). The SPS consists of six facets of the psychopathic personality (Callous-unemotional Traits, Social Potency, Confidence, Stress Immunity, Risk-taking, and Manipulation), each of which have potential applicability to successful life outcomes, both intrinsic and extrinsic.

The conceptualisation and empirical findings within the area of successful psychopathy has been difficult to pin down due to the paradoxical nature of the construct of psychopathy (Kiehl & Lushing, 2014), whereby it is often considered a pathological personality disorder outlined by its maladaptive nature and strong associations with violent antisocial behaviour and ongoing criminality (Viding, 2004). Therefore, there is still contention within the field as to what psychopathy and successful psychopathy are as constructs and how individuals high on psychopathic traits may be able to garner success within the general population (Patrick, 2018).

Furthermore, it is important to address convergent and divergent validity using pre-existing measures when developing a new assessment within the field of psychopathy. This will highlight any overlap within the structures with an aim to identify which facets associated with psychopathy are so-called “core” traits, which traits appear only within the prototypical psychopath, and finally whether antisocial or criminal behaviour can be considered pivotal to the definition of psychopathy. Hare (1980/85/91) sought to develop the work of Cleckley (1976/91) by transforming the theoretical criteria of psychopathy into a reliable diagnostic measurement; The Psychopathy Checklist pre- (PCL; Hare, 1980) and

post-revision (PCL-R; 1985). Both measures require the corroboration of personal interviews and background information. The PCL-R is considered the gold standard of psychopathy assessment (Fulero, 1995; see also Faraone & Tsuang, 1994) and demonstrates sound psychometric properties and is widely used within both forensic and clinical populations (Hare, 1996). However, assessing dysfunctional impulsivity and aggression as the fourth element of the most recent PCL-R tool (Hare, 2003) has been disputed, and although lack of empathy and regret are essential elements in all theories of psychopathy (Crego & Widiger, 2022), and these traits are present within this measure, there are still disagreements over whether aggression, antisocial behaviour, and criminal propensities should also be considered essential (Skeem & Cooke, 2010). Some view these traits as consequences of the condition rather than criteria, this is commonly referred to as the “Consequence Hypothesis” (Berg et al., 2013; Cooke & Michie, 2001; Gao & Raine, 2010), and there could be additional moderating or protective traits or factors which influence behaviour or the “consequences” such as normal or superior cognitive functioning, stable relationships, cognitive empathy, and positive childhood experience.

Despite the PCL-R being considered gold standard, it is unlikely to be useful when measuring subtypes of psychopathy in subclinical samples, thus hampering the ability to identify successful psychopaths, this could also apply to its derivative self-report measures. Two such examples are the Levenson Self-Report Psychopathy scale (Levenson et al., 1995) and The Self-Report Psychopathy Scale (SRP; Hare, 1980) and its later iterations (SRP-II; Hare et al., 1989; SRP-III; Neuman et al., 2012; SRP-4; Paulhus et al., 2014). Such scales are loosely based on the two-factor PCL-R model (Hare, 2003) and are further split between interpersonal/affective traits and behavioural traits, which is useful in identifying how the SPS fits on the spectrum of psychopathy assessment and whether the antisocial behavioural aspects of the disorder are present across both prototypical and atypical psychopathic trait

development. However, they are unlikely to be strongly associated in terms of their propensity for success due to their reliance on antisocial behaviour as a defining feature (Cooke et al., 2004), incorporating items such as “I have been convicted of a serious crime” (SRP-III) and “I have been in a lot of shouting matches with other people” (LSRP).

There are additional measures of psychopathic traits which do not follow the typical PCL model. One such example is the Triarchic Psychopathy Measure (TriPM; Patrick et al., 2010), which defines psychopathy on a three-factor model—disinhibition, meanness, and boldness—is also another way to assess psychopathic qualities (Patrick et al., 2009). Disinhibition and Meanness reflect the maladaptive side of psychopathy, whereas Boldness represents adaptivity in the form of social charm, fearlessness, and stress immunity. However, Boldness was largely unrelated to conscientiousness, a trait considered to be important within the successful psychopathy construct (Mullins-Sweatt et al., 2010). Therefore, it is unlikely that the TriPM can explain successful psychopathy any more effectively than the pre-existing measures (Blagov et al., 2016).

In addition to the lack of association between boldness and conscientiousness, the spectrum of adaptive traits measured by existing instruments is limited. Some characteristics proposed by Cleckley as common traits observed in individuals with high psychopathic traits which could be considered adaptive, are not assessed by the PCL-R, SRP, LSRP or the TriPM (i.e., absence of delusions and irrational thinking). Moreover, due to the limited number of adaptive traits assessed within existing measures of psychopathic traits, it is possible that the predictive value of these instruments, to identify successful psychopathic individuals, might not be optimal and could benefit from an extension assessing a wider range of adaptive psychopathic traits. Although some of the measures focus on both adaptive and maladaptive traits, these instruments solely assess psychopathy as a maladaptive affective, interpersonal, and behavioural construct and negate any potentiality for subtypes.

With an aim to reconciling the theoretical conceptualisation and barriers that plague this construct, a successful psychopathy scale was developed (see Chapter 4; SPS; Wallace et al., 2022). During the development of the SPS, the author identified constructs, using a systematic review, which may be considered adaptive, beneficial, or tied with successful outcomes, both central and peripheral to psychopathy and those that have specifically demonstrated associations with pre-existing measures of psychopathic traits in non-forensic populations (Wallace et al., 2022).

Subsequently, a pool of 14 distinct constructs emerged, described through 175 items. Following two elimination rounds of items through examination of internal consistency reliability, an exploratory factor analysis using a parallel analysis, and a Rasch analysis, a 6-facet solution emerged (Callous-unemotional traits, Social Potency, Confidence, Risk Taking, Stress Immunity, and Manipulation). The SPS characterises this atypical development of psychopathy as a subtype consisting of 6 intersecting but distinguishable constructs of Callous-unemotional Traits, Social Potency, Confidence, Risk Taking, Stress Immunity, and Manipulation. Both a long form and short form version of this scale has been devised and has demonstrated promising evidence of construct validity (Wallace et al., 2022, see Chapter 4).

The scale was designed to build upon previous work conducted by Durand (2019) who developed the Durand Adaptive Psychopathic Traits Questionnaire (DAPTQ). The SPS underwent more rigorous testing including a Rasch analysis and is targeted more towards measuring self-report successful psychopathy, whereas the DAPTQ by the authors own admission (see Durand, 2019) should not be considered a psychopathy measure and instead focuses on adaptive traits often associated with psychopathy and existing psychopathy measures.

Current Study

By comparing the SPS to existing self-report measures of psychopathic traits, it will be possible to demonstrate both the expected convergent and divergent validity of the scale. Furthermore, based on existing theoretical literature and a previous validation study conducted on the SPS, it is hypothesised that the SPS will demonstrate convergent and divergent validity with the existing measures of self-report psychopathy, primarily in relation to positive associations with Factor 1 traits (e.g., affective, and interpersonal), TriPM Boldness, and TriPM Meanness, and negative or weak correlations between the SPS and Factor 2 traits (e.g., recklessness and antisocial behaviour). Moreover, it was predicted that the SPS will have good convergent validity with most factors of the DAPTQ, specifically fearlessness and leadership, but it was predicted there will be no significant relationship between the SPS and creativity. Finally, it is expected that the SPS will positively predict good socioeconomic status, whilst the PCL-R derived scales will negatively predict socioeconomic status. Lastly, we predict the scale will positively predict an expectancy for success in various domains including general efficacy, career development, and problem solving.

The aims of this paper are to investigate the concurrent validity of the SPS as examined by Pearson's correlations between the measure and existing validated self-report measures of psychopathy. In addition, further examinations were conducted investigating the predictive validity of the scale using an existing measure of success expectancy and socioeconomic status measures.

Method

Participants

A total of 309 participants were recruited. Sample size was derived from previous similar studies of this nature (e.g., Durand, 2019; Ruchensky et al., 2017). After removal of outliers and incompletes, the total sample for this study was 306 participants. There was a roughly equal split in terms of sex (51.3% female), and the total sample had a mean age of 36 (SD = 14.4) and a range of 18 to 74. All participants were located in the United Kingdom (UK). Regarding educational attainment, participants were mostly university graduates (38.2%). Following this, the most common education levels were A-Level or equivalent (20.6%), GCSE or equivalent (14.7%), Master's degree (12.4%, 1 or more years at university with no degree (11.1%), Doctorate (2.6%), and finally primary school education (0.3%). Participants also reported on their employment status; student (18.3%), unemployed (18.3%), full-time employment (40.5%), and part-time employment (22.5%), one participant did not report.

Participants were recruited via the crowdsourcing website Prolific. Although it does not overcome the general limitations of online research, Prolific is considered a viable means of participant recruitment (Peer et al., 2017). Inclusion criteria stated that participants needed to be fluent in English and over 18 years of age. Participants were invited to complete an online survey. They provided written informed consent in accordance with Nottingham Trent University research protocols and national ethical guidelines by ticking a box on the first and last pages of the survey, and then completed demographic questions and a battery of psychometric measures. Those participants who completed the survey were reimbursed with for their time on completion at a rate of £5.50 per hour.

Measures

Demographics Participants were asked to provide their sex, age, employment status, field of employment, estimated household income, and educational attainment.

Successful Psychopathy Scale (SPS; Wallace et al., 2022) is a 54-item self-report measure, based on a 6-factor structure. The measure has 6 subscales which assess three distinct groups of traits associated with successful psychopathy in general population samples (i.e., interpersonal, affective, and behavioural). The subscales are: Callous-unemotional Traits (12 items), Social Potency (12 items), Confidence (8 items), Risk Taking (9 items), Stress Immunity (8 items), and Manipulation (5 items). All items are measured on a 5-point Likert scale ranging from Strongly Agree to Strongly Disagree. The SPS showed high reliability for the total scale ($\alpha = .84$) and the subscales; Core Psychopathy ($\alpha = .87$), Social Potency ($\alpha = .90$), Confidence ($\alpha = .82$), Risk Taking ($\alpha = .82$) and Stress Immunity ($\alpha = .86$). The final subscale of Manipulation demonstrated good reliability ($\alpha = .66$).

Levenson Self-Report Psychopathy Scale (LSRP; Levenson et al., 1995) is a 26-item self-report measure, based on the factor structure within the Psychopathy Checklist- Revised (PCL; R: Hare, 1991/2003) and is designed to address both affective/interpersonal and behavioural features associated with psychopathy. The measure has two subscales: Primary Psychopathy or Factor 1 (16 items) and Secondary Psychopathy or Factor 2 (10 items). All items are measured on a 4-point Likert scale ranging from Strongly Disagree to Strongly Agree. The LSRP showed high reliability for the mean score ($\alpha = .83$) and both subscales of Primary Psychopathy ($\alpha = .84$) and Secondary Psychopathy ($\alpha = .73$).

Self-Report Psychopathy, Version III (SRP-III; Neumann et al., 2012) is a 64-item self-report measure designed to measure the four facets of psychopathy as described by the PCL-R four facet model. The four subscales are: Interpersonal (16 items), Affective (16

items), Impulsivity (16 items), and Antisocial behaviours (16 items). Responses are provided using a 5-point Likert scale ranging from Disagree Strongly to Agree Strongly. The four facets are then calculated as a two-factor structure, Interpersonal Manipulation and Callous Affect, and Erratic Lifestyle and Criminal Tendencies to represent Primary Psychopathy and Secondary Psychopathy respectively. The SRP-III showed good reliability for the total scale ($\alpha = .89$) and both subscales of Primary Psychopathy ($\alpha = .84$) and Secondary Psychopathy ($\alpha = .84$). The SRP-III was selected for use in this research due to the SRP-4 being inaccessible due to paywalls.

The Triarchic Psychopathy Measure (TriPM; Patrick et al., 2010) is a 58-item, self-report questionnaire, which consisting of three distinct phenotypic components including Boldness (19 items), Meanness (19 items), and Disinhibition (20 items). The TriPM is measured using a 4-point Likert scale from 3 (True) to 0 (False). Seventeen items were reversed scored; scale totals were calculated with higher scores indicating higher levels of psychopathic traits. The TriPM demonstrated high reliability for the total scale ($\alpha = .88$) and the subscales of Boldness ($\alpha = .87$), Meanness ($\alpha = .87$), and Disinhibition ($\alpha = .85$).

Durand Adaptive Psychopathic Traits Questionnaire (DAPTQ; Durand, 2019) is a 38-item self-report measure. The measure has 8 subscales which assesses adaptive traits associated with psychopathy which are Leadership (4 items), Logical Thinking (5 items), Composure (6 items), Creativity (4 items), Fearlessness (6 items), Focus (4 items), Extroversion (6 items), and Management (3 items). All items are measured on a 6-point Likert scale ranging from Strongly Disagree to Strongly Agree. The DAPTQ showed high reliability for the total scale ($\alpha = .90$) and the subscales of Leadership ($\alpha = .85$), Logic ($\alpha = .69$), Composure ($\alpha = .90$), Creativity ($\alpha = .88$), Fearlessness ($\alpha = .81$), Focus ($\alpha = .80$), Extroversion ($\alpha = .84$), and Management ($\alpha = .71$).

The Life Success Measures Scale (LSMS; Parker & Chusmir, 1992) is a 42-item self-report survey consisting of six dimensions of life success including Status/Wealth (8 items), Contribution to society (8 items), Family relationships (8 items), Personal fulfilment (8 items), Professional fulfilment (8 items), and Security (5 items). The LSMS is measured using a 5-point Likert scale rating the importance of the item to the participant on a scale of 1 (Never important) to 5 (Always important). No items are reversed, scale totals were calculated. The LSMS typically shows high reliability. Parker & Chusmir (1992) reported reliabilities of $\alpha = .93$ for the total scale, as well as for items found in each subscale: Status/Wealth ($\alpha = .80$), Contribution to society ($\alpha = .63$), Family relationships ($\alpha = .70$), Personal fulfilment ($\alpha = .47$), Professional fulfilment ($\alpha = .56$), and Security ($\alpha = .56$). Subscales were calculated in this study as Status/Wealth ($\alpha = .86$), Contribution to Society ($\alpha = .89$), Family Relationships ($\alpha = .92$), Personal Fulfilment ($\alpha = .87$), Professional Fulfilment ($\alpha = .75$), and Security ($\alpha = .70$).

The Generalised Expectancy for Success Scale (GESS; Corcoran & Fisher, 2000; Fibel & Hale, 1978) is a 30-item self-report survey consisting of statements prefixed with “In the future I will”. This survey can be defined as the belief that one will be able to attain desired goals or can be considered the “locus of control of success”. Higher scores indicate participants’ greater expectancy for success in the future and greater motivation to face difficult challenges. The scale was calculated for this study and showed high reliability within this sample for its total ($\alpha = .98$) as well as the items which make each subscale: Career Orientation ($\alpha = .87$) General Efficacy ($\alpha = .79$), and Personal Problem Solving ($\alpha = .79$).

Socioeconomic Status (SES) To create a total SES score, participants answered questions on household income (1 = Less than 6000 GBP, 2 = 6000 to less than 13,000 GBP, 3 = 13,000 to less than 19,000 GBP, 4 = 19,000 to less than 26,000 GBP, 5 = 26,000 to less than 32,000 GBP, 6 = 32,000 to less than 48,000 GBP, 7 = 48,000 to less than 64,000 GBP,

8 = 64,000 GBP or more), educational attainment (1 = Primary School, 2 = GCSE's, 3 = A Level, 4 = 1 or more years of university (no degree), 5 = Bachelors degree, 6 = Postgraduate degree, 7 = Doctorate), and employment status. Higher scores indicate higher SES and 230 participants completed this measure. This is based on a similar method of creating a composite SES score as described in Truhan et al. (2022) and Kochanska et al. (2012) whereby each of the individual indices are grouped to create a composite variable, of which a mean score is calculated.

Results

Sex Differences

Independent *t*-tests were used to test sex differences between males and females within this sample. Males reported greater levels of successful psychopathy ($t(303) = 3.45, p < .001, d = 0.40$), TriPM Total ($t(303) = 5.97, p < .001, d = 0.69$), Self-Report Psychopathy Total ($t(303) = 5.90, p < .001, d = 0.67$), Levenson's Self Report Psychopathy Mean ($t(303) = 3.4, p < .001, d = 0.38$), and the Durand Adaptive Psychopathic Traits Questionnaire Total ($t(303) = 3.37, p < .001, d = 0.35$). Females reported greater levels of Generalised Expectancy for Success ($t(303) = -0.24, p < .001, d = 0.02$). These were *t*-tests were conducted using total scale scores.

Convergent and Divergent Validity

The intercorrelations among the 6 SPS subscales were computed and are shown in Table 5.1. All of the SPS facets correlated strongly with the SPS total score ($r = .494-.802$) and the majority of facets positively correlated moderate to strongly with each other ($r = .113-.611$).

Table 5.1*Inter-Correlations Between the Successful Psychopathy Scale and The SPS Subscales*

Variables	M(SD)	1	2	3	4	5	6	7	α
1. SPS total	154.33(20.00)	-							.84
2. CU traits	23.11(8.10)	.57**	-						.86
3. Social Potency	37.23(9.47)	.80**	.15**	-					.89
4. Confidence	28.08(5.67)	.57**	-.10	.61**	-				.82
5. Risk taking	24.26(6.89)	.50**	.31**	.52**	.35**	-			.81
6. Stress Immunity	23.88(6.69)	.49**	.038	.50**	.53**	.48**	-		.85
7. Manipulation	13.00(3.53)	.71**	.59**	.42**	.15**	.39**	.11**	-	.64

Note. $p < .01^*$, $p < .001^{**}$, 1 = SPS Total, 2 = CU traits, 3 = Social Potency, 4 = Confidence, 5 = Risk Taking, 6 = Stress Immunity, 7 = Manipulation

The descriptive data and the correlations between the SPS and the TriPM, SRP-III, LSRP, DAPTQ are shown in Table 5.2. The SPS demonstrated good internal consistency reliability for its total score and all its subscales for all samples, as well as strong correlations with well-established assessments of the psychopathic personality and with other personality measures. As expected, the SPS Total was highly positively correlated with TriPM Total and TriPM Boldness, and DAPTQ Total, and DAPTQ Leadership, moderately positively correlated with TriPM Meanness, SRP-III Primary, SRP-III Secondary, SRP-III IPM, SRP-III CA, SRP-III ELS, LSRP Mean, LSRP Primary, LSRP Secondary, DAPTQ Composure, DAPTQ Fearlessness, and DAPTQ Focus, and weakly positively correlated with TriPM Disinhibition, SRP-III ASB, DAPTQ Logic, and DAPTQ Extroversion. Associations between DAPTQ Creativity and DAPTQ Management were weak and non-significant.

Table 5.2*Correlations Between the Successful Psychopathy Scale (SPS) and Prototypical Psychopathy Measures*

	Variables	M (SD)	1	2	3	4	5	6	7	α
8.	TriPM Total	54.87(17.2)	.58**	.16**	.42**	.04	.62**	.25**	.52**	.88
9.	TriPM Boldness	26.58(9.1)	.60**	.15**	.72**	.58**	.68**	.68**	.23**	.86
10.	TriPM Meanness	12.55(7.8)	.36**	.75**	.04	-.18**	.36**	.06	.43**	.87
11.	TriPM Disinhibition	15.73(8.3)	.20**	.55**	.02	-.37**	.20**	-.29**	.40**	.85
12.	SRP Primary Mean	2.21(.52)	.47**	.74**	.19**	-.12*	.40**	.05	.52**	.84
13.	SRP Secondary Mean	1.90(.49)	.36**	.57**	.21**	-.13*	.50**	.03	.45**	.84
14.	SRP IPM	2.24(.60)	.49**	.67**	.28**	-.09	.38**	.01	.54**	.82
15.	SRP CA	2.18(.54)	.36**	.67**	.06	-.13*	.35**	.09	.40**	.73
16.	SRP ELS	2.39(.68)	.38**	.54**	.26**	-.10	.58**	.05	.44**	.84
17.	SRP ASB	1.43(.46)	.22**	.43**	.06	-.14**	.22**	-.01	.33**	.72
18.	LSRP Primary Mean	1.88(.39)	.37**	.70**	.09	-.25**	.28**	-.13*	.58**	.84
19.	LSRP Secondary Mean	1.86(.44)	.36**	.70**	.08	-.27**	.25**	-.03	.52**	.73
20.	DAPTQ Total	122.60(12.71)	.56**	.48**	.41**	.28**	.47**	.33**	.41**	.59
21.	DAPTQ Leadership	13.16(4.22)	.67**	.28**	.75**	.49**	.55**	.41**	.38**	.84
22.	DAPTQ Logic	17.63(2.57)	.20**	.29**	.04	-.01	.07	-.12*	.29**	.68
23.	DAPTQ Composure	19.59(2.91)	.36**	.16**	.27**	.35**	.29**	.43**	.15**	.89
24.	DAPTQ Creativity	12.23(3.16)	.01	.13*	-.09	-.13*	-.02	-.03	.13*	.88
25.	DAPTQ Fearlessness	17.70(4.23)	.40**	.48**	.26**	.11*	.53**	.24**	.33**	.81
26.	DAPTQ Focus	12.51(2.47)	.30**	.12*	.25**	.39**	.20**	.33**	.09	.80
27.	DAPTQ Extroversion	19.79(2.71)	.12*	.16**	.01	-.00	.07	.1	.05	.84

28. DAPTQ	9.95(1.96)	-.03	.22**	-.19**	-.27**	-.13*	-.22**	.08	.71
Management									

Note. $p < .01^*$, $p < .001^{**}$, 1 = SPS Total, 2 = CU traits, 3 = Social Potency, 4 = Confidence, 5 = Risk Taking, 6 = Stress Immunity, 7 = Manipulation

The descriptive data and the correlations between the SPS and SES, LSMS, and GESS are shown in Table 5.3. The SPS demonstrated moderate to strong correlations with each facet of success expectancy and status seeking, as measured by LSMS Status. As predicted, the SPS total was weakly positively correlated with good socioeconomic status. The subscale of Social Potency demonstrated strong correlations with each facet of the GESS measure, implicating its role in successful outcomes. Associations between CU Traits and Manipulation were weakly associated with GESS but strongly associated with status seeking. The SPS Total demonstrated a weak positive correlation with LSMS Family, which was unexpected and requires further discussion.

Table 5.3

Correlations Between the Successful Psychopathy Scale, The Life Success Measure Scale (LSMS) and The Generalised Expectancy For Success Scale (GESS) By Their Respective Subscales

Variables	M(SD)	SPS	1	2	3	4	5	6	α
Socioeconomic Status		.21**	.08	.14*	.26**	.15*	.16*	.10	
LSMS Status	21.13(6.23)	.41**	.37**	.28**	.07	.29**	.12	.52**	.84
LSMS Society	30.62(6.31)	.16**	-.21**	.27**	.21**	.12	.05	.06	.89
LSMS Family	33.55(7.47)	.11*	-.19**	.23**	.27**	.03	.03	.03	.92
LSMS Personal Fulfilment	36.56(3.80)	.07	-.23**	.18**	.22**	.04	.03	-.03	.84
LSMS Professional Fulfilment	19.94(3.55)	.12*	-.19**	.20**	.20**	.03	.02	.07	.78
LSMS Security	18.88(3.62)	.23**	-.03	.24**	.16*	.14*	.08	.22**	.75
GESS Total	107.59(17.71)	.39**	-.24**	.55**	.65**	.30**	.54**	.06	.93
GESS General Efficacy	41.33(7.33)	.41**	-.19**	.53**	.64**	.31**	.49**	.10	.87
GESS Career Orientation	23.79(4.80)	.41**	-.20**	.53**	.60**	.28**	.52**	.09	.79
GESS Personal Problem Solving	30.45(5.41)	.33**	-.24**	.48**	.58**	.24**	.48**	.06	.79

Note. * $p < .01$, ** $p < .001$ 1 = CU traits, 3 = Social Potency, 4 = Confidence, 5 = Risk Taking, 6 = Stress Immunity, 7 = Manipulation

Predictive Validity of Success Expectancy

A simple linear regression was conducted to test whether individuals who scored high on successful psychopathy had more propensity to expect successful outcomes in their lives (as measured by the Generalised Expectancy for Success; GESS). The results of this regression showed the model explained 39.8% of the variance and this model was significant $F(1,304) = 57.22, p < .001$, with an R^2 of .158. The regression coefficient ($B = .352$) suggests that on average, for every one-point increase in successful psychopathy there should be a .352 increase in expectancy for successful outcomes. Moreover, a multiple linear regression demonstrated that the driving forces of this relationship were reduced core psychopathic traits ($B = -.195$), and higher levels of social potency ($B = .156$) and confidence ($B = .469$).

In addition, hierarchical regressions were conducted to ensure that age and sex were not controlling this relationship. In Model 1, results demonstrated that neither age nor sex were significant predictors of GESS, $F(2, 11) = .232, p = .793$, with an R^2 of .002. However, in Model 2 when including the facets of the SPS, the R^2 change was 51.4%, demonstrating that age and sex were not masking this relationship. Therefore, this suggests that individuals' scoring high on the SPS demonstrated a more internal locus of control, higher levels of self-belief, and an ability to problem solve with efficiency. Regarding the SPS facets and success expectation, these relationships can be defined by lower intensity CU traits, and higher social potency and confidence, with no input from age or sex.

Moreover, a multiple linear regression was conducted to examine whether prototypical primary and secondary psychopathy as measured by the LSRP were positive or negative predictors of GESS. The model overall was significant, $F(2, 406) = 9.13, p < .001$, with an R^2 of .074. The regression coefficients suggested that for every one-point increase in primary psychopathy there should be a -2.13 score in GESS and for secondary psychopathy

there should a -2.46 score in GESS. This suggests that prototypical psychopathy does not indicate success expectancy, and there should be lower levels of self-belief, difficulty in problem solving, and an external locus of control.

Predictive Validity of Socioeconomic Status

A simple linear regression was conducted to test whether individuals who scored high on successful psychopathy had higher scores of Socioeconomic Status (SES). A significant regression equation was found ($F(1,228) = 9.92, p < .01$), with an R^2 of .038. The regression coefficient ($B = .032$) indicates that for every one-point increase in successful psychopathy there should be a .032 increase in SES. Overall, this demonstrated that successful psychopathy was a significant positive predictor of good SES.

A second linear regression was conducted testing whether the existing psychopathy measures based on the PCL-R construct were positive or negative predictors of good SES (SRP-III; $F(1,228) = .088, p = .768$, with an R^2 of $-.004$. The regression coefficient ($B = -.125$) indicated that a one-point increase in the SRP-III, on average led to a decrease in SES of .125. Similar findings were reported for the LSRP $F(1, 228) = .173, p = .678$, with an R^2 of $-.004$. The regression coefficient here ($B = -.238$) demonstrates that a one-point increase on the LSRP led to a decrease in SES of .238.

General Discussion

By selecting a wide range of adaptive traits known to correlate with the psychopathic personality and those considered to be integral to the construct of successful psychopathy, it was possible to develop an assessment specific to these traits and investigate the relationship between them. The aims of this study were to investigate the convergent validity of the newly developed Successful Psychopathy Scale (SPS; Wallace et al., 2022) and explore how both

prototypical and successful psychopathy constructs map onto an expectancy for successful life outcomes.

The development of the SPS is delineated in Chapter 4, however it is important to recap the construct before discussing the results of this validation study. The first facet refers to what are often considered the core traits of psychopathy (e.g., callousness, low empathy, shallow affect). The second facet assesses social adeptness and the ability to charm others and create bonds. The third facet encompasses self-belief, willpower, and achievement striving. The fourth facet assesses impulsivity and decision-making. The fifth facet refers to an individual's level of resilience and lack of internalisation. Finally, the sixth facet refers to motivation, power-seeking, and doing whatever it takes to get ahead. Taken together the SPS demonstrates the construct of successful psychopathy (i.e., individuals with high core psychopathic traits (Facet 1) and the associated adaptive qualities which help to buffer against maladaptive outcomes often associated with the psychopathic personality), thus presenting a formula for these individuals to benefit and prosper within the general population, without exhibiting overt antisocial behaviours.

The correlations between the SPS and existing measures of psychopathy support its ability to tap into psychopathic traits within general population samples and support the initial hypotheses about the SPS and its relationships with existing psychopathy self-report measures. As expected, males scored higher than females on every measure of self-report psychopathy, which is consistent with previous literature (e.g., Salekin et al., 2014).

With regard to the entire sample, the strong and moderate associations between constructs such as boldness, fearlessness, leadership, interpersonal manipulation, and callous affect support the existing theoretical construct of what successful psychopathy encompasses (Lilienfeld et al., 2015; Persson et al., 2019; Smith et al., 2014; Wallace et al., 2022) and demonstrates the sound ability of the SPS to begin to capture this. However, the hypotheses

that suggested the SPS would be strongly negatively correlated with Factor 2 traits was unfounded, and yet despite this finding, it still lends support for the Successful Psychopathy model whereby the traits are still aligned with prototypical psychopathy, but there are internal and external factors which influence behavioural outcomes (Cooke et al., 2014; Hall & Benning, 2008; Lilienfeld et al., 2014), and future research should be targeted towards uncovering these factors, which could potentially include increased empathy, sound reasoning skills, and reduced aggression.

The positive correlation between SPS Total and LSMS Status was comparable in magnitude to that between SPS Total and GESS Career Orientation. Scores on SPS also exhibited predicted associations with each of the additional GESS subscales and were related strongly to SPS Social Potency and SPS Risk Taking scores. Furthermore, multiple regressions demonstrated that the relationship between SPS and GESS can be characterised by reduced CU traits, and higher levels of both social potency and confidence offering support for the Differential severity and Differential configuration models (Hall & Benning, 2006; Lilienfeld et al., 2014). In addition to these predicted relationships, SPS CU traits were positively associated with LSMS Status, and negatively associated with each other subscale within these measures, thus supporting the theoretical model that CU traits are not themselves directly associated with success expectancy (Persson & Lilienfeld, 2019) and they place importance purely on status as driven by their egocentrism (Welsh & Lenzenweger, 2021), however alongside buffering traits they can have desirable outcomes, as supported by the overall scale having positive relationships with both good socioeconomic status and success expectancy. In addition, there were some unexpected findings such as the SPS Total being positively, albeit weakly, associated with LSMS Society and LSMS Family, which could suggest that the successful psychopathy subtype places more value on peer relationships than

their prototypical counterpart. This would be important to examine further in regard to the SPS and relationships.

Furthermore, findings within this sample suggested that females have a higher expectancy for success than males. This was not expected due to previous research suggesting males have a stronger internal locus of control which indicates overall better well-being and therefore “success” or an expectancy for success (Sherman et al., 1997; Usayl et al., 2022). However, these studies typically use the locus of control (LOC; Levenson, 1973), which focuses more on an individual’s belief about their ability to control events around them, which is perhaps methodologically different than having a belief they will be successful. These results warrant further investigation into how this subtype of psychopathy may respond within relationship contexts and whether the results from the GESS can be replicated within an independent sample.

This initial validation study provides preliminary but promising support for the construct validity of the SPS and suggests that Successful Psychopathy is both a theoretical and empirical construct which can be assessed within general population samples. The SPS demonstrated good convergent validity with existing self-report measures of psychopathy, and as predicted had stronger associations with primary or Factor 1 items, as well as moderate to strong associations with each factor of the DAPTQ, apart from creativity and good management as expected. The DAPTQ is considered to be a measurement of adaptive traits often associated with the psychopathy construct (see Chapter 2), therefore the strong relationships between this measure and the SPS demonstrates good convergent validity. The moderate to weak correlations of the SPS and indicators of secondary psychopathy or disinhibition indicates that the SPS possesses substantial variance that is not shared with overt antisocial, reckless, or criminal behaviour, helping to support its argument for divergent validity. These results and findings are consistent with theoretical judgments from previous

studies within the field (Benning et al., 2018; Du & Templar, 2022; Lilienfeld et al., 2015; Steinert et al., 2017; Wallace et al., 2022). However, whilst the results from the total SPS scale demonstrate promise, it is important to also present the findings on how each sub-facet related to the existing psychopathy measures and indices of success.

Successful Psychopathy Construct

In terms of CU traits, this facet captures the core traits associated with psychopathy, therefore it was expected that this subscale would demonstrate moderate to strong associations with existing psychopathy items which were similar in nature as per previous findings (e.g., Benning et al., 2018; Crego & Widiger, 2022; Johnason et al., 2020). Key findings included strong positive associations with TriPM Meanness and Disinhibition, SRP-III Mean, primary, interpersonal manipulation, callous affect, and erratic lifestyle, and weak associations with all DAPTQ factors, apart from fearlessness. This implies that the subscale has good convergent validity as it clearly associates with other existing measures of core psychopathic traits, however the weak association with each of the DAPTQ factors indicates that the DAPTQ may be measuring adaptive traits associated with psychopathy, but perhaps is not capturing the core features of the psychopathic personality, which supports the findings of the scale's author themselves who described the DAPTQ as a correlate of psychopathy, not a measure of it (Durand, 2017).

Social potency refers to a certain interpersonal efficacy and an ability to charm and influence others, whilst remaining imperturbable within social contexts (Mahaffey, 2006). This subscale bears similarities to parts of the boldness and fearlessness constructs, therefore it was expected that there would be relationships within those areas. Whilst this subscale did indeed show strong positive associations with TriPM boldness and DAPTQ leadership, the association between social potency and DAPTQ fearlessness was fairly weak (.264).

Therefore, it is important to look further into this subscale and how it is reflected in classic constructs such as fearless dominance (as measured by the PPI-R; Lilienfeld & Widows, 2005), as these findings suggest social potency only accounts for part of this cluster; which is consistent with the literature surrounding the fearless dominance construct (Lilienfeld et al., 2012; Patrick et al., 2013).

The construct of confidence here is regarded as encapsulating high self-belief and an ability to self-motivate and complete tasks. This subscale was developed from constructs such as self-esteem, achievement striving, conscientiousness, and pride and was predicted to have strong associations with boldness, fearlessness, leadership, composure and focus. This subscale demonstrated strong positive correlations with boldness and moderate positive associations with leadership, composure, and focus, however, the association between confidence and fearlessness was weak (.117). This subscale was moderate to weakly negatively associated with each existing measure of psychopathy which were derivations of the PCL-R factor structure, further demonstrating the lack of ability for these scales to measure adaptive qualities within the psychopathy construct.

Regarding the subscale of risk-taking, this is thought to capture an individual's ability to make quick decisions and their propensity for impulsive behaviour (Dickman, 1990). As expected, the subscale shared strong positive relationships with TriPM total, TriPM boldness, SRP secondary, SRP erratic lifestyle, DAPTQ leadership, and DAPTQ Fearlessness. Each of the respective subscales represented some type of impulsive behaviour, decision-making, and risk-taking therefore demonstrating good convergent validity of this subscale. In addition, risk-taking was weakly positively correlated with TriPM disinhibition and SRP antisocial behaviour, suggesting the scale has good divergent validity. Assessing risk taking behaviours without mapping strongly onto the maladaptive elements of this feature, such as poor behavioural control and criminal versatility (Hare & Neumann, 2008).

Stress immunity refers to an individual's level of resilience, lack of internalisation, and ability to keep calm under pressure. This sub-facet demonstrated a strong positive association with TriPM boldness as would be expected due to the similarity in their constructs. Other interesting findings include a moderately positive association with DAPTQ leadership and DAPTQ composure, this is supported by previous research suggesting that individuals scoring high in stress immunity or fearless dominance demonstrate good political or leadership skills (Landay et al., 2019; Lilienfeld et al., 2012; Vergauwe et al., 2021). Further supporting this is the weak negative association between stress immunity and TriPM disinhibition which is consistent with findings that indicate disinhibition to be characterised by externalising behaviours and a lack of behavioural restraint under stress (Segara et al., 2022).

The sub-scale of manipulation can be best described as a selection of items targeted towards an individual's disregard for the rights of other, coercive tactics, and a willingness to do anything to get what they want. This facet of successful psychopathy demonstrated strong positive relationships with each of the self-report psychopathy measures, including both primary and secondary psychopathy as measured by the LSRP, and primary psychopathy as measured by the SRP-III. In addition, it also showed moderately positive relationships with TriPM Meanness, TriPM Disinhibition, SRP secondary, as well as its sub-factors of erratic lifestyle and callous affect. Previous research suggests that this manipulative interpersonal style is a hallmark feature of psychopathy (Hoff et al., 2012; Kreis et al., 2012; Miller et al., 2001; Verschuere & te Kaat, 2019), therefore this supports the convergent validity of the SPS, and existing theoretical models of successful psychopathy which argue the core psychopathic traits remain intact and it is only by ameliorating traits and external factors that behavioural outcomes are impacted (Lilienfeld et al., 2015; Selbom et al., 2021).

Socioeconomic Status and Expectancy for Success

Previous literature has identified low or unstable SES as a potential moderator of antisocial or criminal behaviour in prototypical psychopathy (e.g., Bergström & Farrington, 2021; Walsh & Kosson, 2007). This finding was supported within this study with existing psychopathy measures based on the PCL-R construct being negative predictors of good socioeconomic status and the SPS being a positive predictor. Therefore, this further indicates the redundancy of prototypical factorial psychopathy measures in predicting or explaining stable or good SES as an outcome of success. In addition, this supports previous findings which suggest that protective traits such as social adeptness, confidence, and resilience can act as a buffer to the potentially maladaptive traits associated with psychopathy (Wallace et al., 2022). Moreover, CU traits and manipulation were weakly positively associated with good SES, suggesting they have a role to play in objective success. The strongest association was between social potency and SES, which is supported by previous research into corporate or industrial psychopathy whereby these social skills can be beneficial (e.g., Babiak & Hare, 2006), this also maps onto existing models of successful psychopathy and leadership or political skill (e.g., Lilienfeld et al., 2014).

Many studies pay little attention to SES assessment, with little discussion of why particular indicators were chosen over others (Bornstein & Bradley, 2014). According to Liberatos et al. (1988), there is no one optimal measure because the choice of the SES measure is dependent on conceptual significance. This makes SES notoriously challenging to measure (Adler & Stewart, 2010). The findings within this study need to be further examined using different parameters in the future, including variables such as household income and perceived social status. Moreover, there is a need to be more cautious when using aggregate scores (Daly et al., 2002) as these may introduce their own difficulties in interpretation (Oakes & Rossi, 2003). Another complexity of this construct is that the meaning and

measurement of SES differs across sociodemographic groups and there is a distinct lack of precision with the measurements. However, by the 1980s, there was widespread consensus that SES should be a composite variable, often assessing education, income, and employment, because these three variables represent various aspects of family history (Brese & Mirazchiyski 2013), although as discussed this is not without its limitations.

With regard to the expectancy for success measure, the SPS total was moderately to strongly positively associated with each subscale of the GESS, however unlike the SES model, CU traits and manipulation were negatively associated or had no relationship. This further supports the idea that positive adjustment traits such as social potency, stress immunity etc not only exist within the psychopathy construct as Cleckley (1941/76) suggested but they can moderate maladaptive outcomes and not only influence objective success (e.g., SES), but also general well-being in terms of a healthy locus of control, lack of externalisation problems which may result in antisocial behaviour, and higher self-esteem and lowered anxiety.

While SES and success expectancy are both appropriate, albeit limited, starting points for measuring objective and subjective success in individuals with high psychopathic traits, this definition is not without flaws. The issue of status change over time persists, as individuals with high social status occasionally fall down the socioeconomic ladder, or those engaging in white-collar crime may find themselves moving up the ladder due to increased income. Finding a definition that is always clear-cut or infallible is likely impossible, so success should be viewed as a complex construct with multiple fallible indicators. In other words, successful psychopathy can be conceptualised in the same way that other psychological constructs are traditionally conceptualised: as a nomological network (i.e., as a system of predictions linking constructs to external correlates, constructs to other constructs,

and external correlates to other external correlates – see Clark & Watson, 2019; Cronbach & Meehl, 1955).

Limitations and Future Directions

Whilst the findings from this initial validation study have demonstrated promising results, this current study is not without limitations. It is important that these findings be examined and replicated in additional independent samples. Moreover, whilst some of the internal and external factors have been investigated, alternative forms of predictors or moderators of behaviour should be considered moving forward, building on previous research such as Ishikawa et al. (2001) and Gao & Raine (2010) future studies should aim to include indices of childhood experience, executive functioning, relationship experience, and substance use. This would be beneficial in addressing each category of behavioural moderators (i.e., structural, environmental, and contextual; see Steinert et al., 2017). Furthermore, the divergent validity of the SPS could be further tested alongside measures of negative affect such as the Beck Depression Inventory (BDI; Beck, 1996) and the State-Trait Anxiety Inventory (STAI; Spielberger et al., 1970/1983), in addition to measures of aggression (e.g., Reactive Proactive Aggression Questionnaire; RPQ; Raine et al., 2006), empathy (e.g., Questionnaire of Cognitive and Affective Empathy; QCAE; Reiners et al., 2007). Moreover, it would be useful to examine the convergent validity of the SPS alongside other existing measures of prototypical psychopathy such as the Psychopathic Personality Inventory (PPI; Lilienfeld & Windows, 2005), which incorporates more of the Cleckley conceptualisation than that of those based on the Hare model. Unfortunately, this measure is behind a paywall and was inaccessible for this body of research.

Finally, although this newly developed measure assesses the adaptive traits found most commonly associated with primary or Factor 1 psychopathy, it should not be considered a clinical diagnostic psychopathy measurement. This questionnaire assesses a subset of

psychopathy-related traits, both adaptive and potentially maladaptive to better understand how some of the core traits associated with the psychopathic personality could be beneficial within the general population, with the potential for international applicability.

Conclusion

This study offers significant empirical understandings of the construct validity of the SPS. Overall, the scale achieved further convergent validation against existing measures of self-report psychopathy, demonstrating its conceptual differences to prototypical psychopathy, whilst also establishing its position as a subtype. Moreover, the scale demonstrates significant promise as a predictor for both objective and subjective success as demonstrated by positive relationships between stable socioeconomic status and expectancy for successful outcomes in various life domains. Future studies should continue to validate the scale against similar and opposing measures as well as additional indices of real-world success, such as strong cognitive skills and sound decision-making.

Chapter 6. Predictive Validity of the Successful psychopathy Scale

Introduction

Despite psychopathy being commonly considered to encompass antisocial, abnormal, and asocial facets (Arrigo & Shipley, 2001; Kiehl & Hoffman, 2011), ongoing debate exists as to the true nature of psychopathy and which behaviours it accounts for, specifically. Those who contend that psychopathy is a personality *pattern* rather than a pathology take the dimensionality perspective (Lynam, 2002). This perspective is supported by research identifying the applicability of psychopathy to the five-factor model of personality (FFM): Neuroticism, Extraversion, Openness to experience, Agreeableness, and Conscientiousness (Costa & McCrae, 1990a; 2017b) and additional work demonstrating core personality traits at the centre of the psychopathy construct (Cooke & Michie, 2001; Cooke et al., 2005; Skeem & Cooke, 2010a; 2010b; for review see Chapter 1). Despite the need for further investigation into the dimensionality of psychopathy, current evidence strongly supports this perspective, and its foundations within personality profiles within the general population. Furthermore, this personality-centred perspective lends credence to the idea of psychopathy subtypes, and of core prominence for this thesis, that of successful psychopathy.

Successful psychopathy can be defined as a constellation of personality traits which map onto prototypical psychopathy with several distinctly unique characteristics. The Successful Psychopathy Scale (SPS; Wallace et al., 2022 [Chapter 4]) was developed from theoretical understandings of psychopathy (e.g., Cleckley, 1941) as well as both suggestions of successful psychopathy within the extant literature (Hall & Benning, 2005; Lilienfeld et al., 2015) and data pertaining to correlates of psychopathy and success within professional environments (e.g., Babiak & Hare, 2006; Boddy, 2010). The SPS encompasses 6 facets, namely callous-unemotional (CU) traits, social potency, confidence, risk-taking, stress immunity, and manipulation. Findings from Chapter Two demonstrate strong positive

correlations with adaptive features of psychopathy sparsely featured within prototypical measures (e.g., Boldness), and negative correlations with antisocial behaviour and impulsive erratic lifestyle (e.g., Factor 2 traits), thus demonstrating good concurrent validity. However, despite the promising findings from these validations, it is important to ascertain the predictive validity of the scale by investigating potential facilitating factors (e.g., ACEs and cognitive empathy) and outcome behaviours (e.g., aggression, attachment style, and cognitive skill). The following sections will discuss underpinning literature relating to childhood experience, empathy, aggression, and cognitive abilities.

Childhood experience as facilitating factor

One of the widely studied early facilitators of psychopathy are adverse early childhood experiences (see Moreira et al., 2020 for review). Through the theoretical lens of Attachment Theory (Bowlby, 1969a; 1973b; 1980c) which is heavily driven by child and caregiver interactions in early life (Fearon & Roisman, 2017), prototypical psychopathy can in part be explained by experiences of childhood abuse or neglect (Caretta & Craparo, 2010; Ireland et al., 2020). Moreover, Porter (1996) suggests that psychopathy is a result of dysfunctional personal exchanges during childhood (e.g., neglect and abuse), and adverse environmental factors within the home suggesting potential causality. For example, substantial evidence in humans supports an association between a history of abuse (physical and sexual) and increased risk of violence and impulsivity (Dodge et al., 1995; Farrington & Loeber, 2000; Widom, 1992). Similarly, exposure to violence in the home/neighbourhood increases aggressive behaviour (e.g., Miller et al., 1999; Schwab-Stone et al., 1999) possibly by potentiating specific neural systems involved in threat response (Blair et al., 2006). Thus, if threat experience occurs in early childhood this can significantly impact an individual's response to threatening or provocative situations (Charney, 2003). Moreover, the negative effects of adverse childhood experience and trauma on health and well-being being well

documented. Children who have been abused or neglected are more likely to experience negative developmental consequences, such as psychopathology (Cicchetti & Toth, 1995, Toth & Cicchetti, 2013). The trauma may have an impact on the child's biological and psychological development by developing some form of brain impairment that disrupts the regulatory systems essential to sustaining their normal well-being (Cicchetti & Rogosch, 2012). For example, evidence suggests that stressful childhood experiences may cause chromosomal damage and functional abnormalities in the developing brain (Anda et al., 2010, Cicchetti, 2013, Danese & McEwen, 2012, Shalev et al., 2013; Teicher et al., 2003).

Previous research demonstrates a linear relationship between psychopathic traits and adverse childhood experiences (de Ruiter et al., 2022; Lang et al., 2004; Todorov et al., 2023). Moreover, theoretical conceptualisations of the psychopathy subtypes propose that the core affective and interpersonal traits are innate and present at birth (Karpman, 1941a; 1949b), whereas the impulsive antisociality is thought to develop as a result of adverse environmental experiences including Adverse Childhood Events, according to a body of self-report, other-report and clinical interview evidence (ACEs; *see Moreira et al., 2020 for a systematic review*). Moreover, one distinguishing trait of psychopathy is a decrease, not an increase, in the individual's reactivity to threat, such as incidents of abuse or assault (Cleckley, 1976; Hare, 1970; Lykken, 1995; Patrick, 1994), which suggests that psychopathy sub-types may be differentially driven by developmental experiences, as they are less likely to internalise and are thus less susceptible to traumatic exposure (Blair et al., 2006).

Such findings on the differential backgrounds of psychopathic subtypes could be a notable factor in distinguishing prototypical psychopathy from successful psychopathy. For example, studies by Gao and Raine (2010) and Gao et al. (2020) suggested so-called “unsuccessful” psychopaths (i.e., incarcerated/convicted) experienced higher levels of childhood abuse than “successful” psychopaths (i.e., those that escaped detection). Though

useful as a means of providing baseline data, this programme of research has framed the concept of successful psychopathy through an alternative lens (i.e., intrinsic and extrinsic benefits across a multitude of domains, both personal and professional, (but see Chapter 3 for a full review), and so it is important to replicate and advance this knowledge using the newly developed construct of successful psychopathy that measures intrinsic and extrinsic success.

There has been significantly less research conducted on the role of positive or benevolent experiences in early childhood and how these events may offer protection from engaging in antisocial or criminal behaviours. Previous research has demonstrated relationships between positive childhood experiences and resilience in adversity (Wright et al., 2013), as well as how they might predict lower maladaptive psychosocial development in the form of lower anxiety, depression, and personality dysfunction (Hillis et al., 2010). Investigations into benevolent childhood and psychopathy, specifically, is generally sparse. However, Starbird & Story (2020) demonstrated positive significant correlations between less positive childhood experiences and high narcissism (a well-known correlate of psychopathy; Falkenbach et al., 2013), indicating that positive childhood experiences could have an influence on potentially maladaptive personality traits. Despite limited research on this area, Bégin et al. (2022) found that positive parenting, between the ages of 10 and 12, acted as a protective barrier against delinquency in children with CU traits. Therefore, it can be speculated that benevolent childhood experiences might influence the development of psychopathic personality subtypes, which is perhaps in part due to exposure to empathetic understanding and teaching during early development (Zahn-Waxler et al., 1992) or a blunted empathetic response following childhood trauma (Narvey et al., 2020).

Cognitive empathy as facilitating factor

Empathy is a human interactional process, absence, or deficits of which are considered a core aspect of psychopathy (Blair, 2007; Cleckley, 1976; Patrick et al.,

2009; Verschuere et al., 2018; Verschuere & te Kaat, 2020). Although there exist several definitions of empathy, it is now largely accepted as a multifaceted construct (see Hall & Schwartz, 2019). However, the specific sub-domains of empathetic understanding are less widely agreed upon (Blair, 2005; de Waal & Preston, 2017; Dvash & Shamay-Tsoory, 2014; Jolliffe & Farrington, 2006; Reniers et al., 2011; Zaki & Ochsner, 2012). Nevertheless, despite these inconsistencies, there exists a point of convergence across these conceptualisations, that is that empathy encompasses at least two facets, cognitive and affective (Kogler et al., 2016). Cognitive empathy is depicted by the capacity to speculate on the thoughts of another or to think from their point of view. These inferences could be related to emotional or cognitive content, such as understanding another person's feelings, or comprehending thoughts, intents, or beliefs (Corradi-Dell'Acqua et al., 2020; Tesar et al., 2020). In contrast, affective empathy is defined as the capacity to perceive and vicariously experience the emotional states of others, as demonstrated by both empathic concern (such as other-oriented feelings of sympathy) and personal sorrow (e.g., self-oriented feelings of discomfort; Grynberg & Konrath, 2020; Israelashvili et al., 2020).

Based on this supposition, Gao and Raine (2010) developed a model to systematise elements that deter individuals with high psychopathic traits from engaging in antisocial and offending behaviours; empathy played a key role in this discussion. Although prior meta-analyses found stronger effects in affective empathy, the most recent version of Gao and Raine's model (Gao et al., 2020) stresses that impulsive-antisocial behaviours are an attribute of deficient empathy at both cognitive and affective levels, which is further supported by additional studies (Jolliffe & Farrington, 2004; Morrow, 2020; van Langen et al., 2014). Furthermore, there are indicators that the successful psychopathy subtype could be hallmarked by higher levels of cognitive empathy, particularly perspective taking, when compared to their prototypical counterparts (Mullins-Nelson et al., 2006), allowing these

individuals to garner certain social skills which enable them to succeed and demonstrate some level of empathic concern, albeit selfishly motivated to attain their goals.

Aggression as an outcome of SP

One of the most prominent outcomes associated with psychopathy is aggression (Anderson & Kiehl, 2014). Regarding goal-striving, aggression is an important factor to consider, particularly when discussing so-called “dark-traits” such as psychopathy, which has consistently been correlated with dominance and power seeking (Verona et al., 2022). The study of aggression has a long-standing tradition in psychological research (Bushman & Anderson, 2001). One such model of aggression is focused on motivations behind aggressive behaviours (Dodge & Coie, 1987), specifically separating reactive aggression (e.g., the propensity to defend oneself against a perceived attack, which can be triggered by provocation, frustration, or threat) from proactive aggression (e.g., deliberate activity carried out with the intent to harm others, attain secondary goals, or profit oneself; Raine et al., 2006).

Furthermore, there is growing evidence that individuals who participate in reactive, affective-driven aggression differ in various ways from those who engage in more goal-directed, proactive aggression (Raine et al., 1998, Walters, 2008). Moreover, reactive aggression (also known as affective aggression) refers to emotional-driven kinds of aggressiveness that frequently arise in response to perceived threats. It is argued that this spontaneous reaction to interpersonal provocation is connected with high affective-physiological arousal and limited cognitive processing (Chase et al., 2001). Proactive aggression, on the other hand, necessitates forethought and preparation, and autonomic arousal is assumed to be limited in goal-directed behaviour (Blair, 2003). Although a variety of antisocial outcomes have been studied in relation to reactive and proactive aggressiveness,

research on the relationship between psychopathic traits and these two types of aggression is limited. However, three important studies come to mind (Blais et al., 2014; Porter et al., 2003; Woodworth & Porter, 2002) demonstrating that high psychopathic traits were primarily associated with proactive rather than reactive aggression.

These findings may have applicability to the successful psychopathy model, particularly in terms of garnering professional success. These individuals may be inclined to use proactive aggressive techniques such as hard manipulation tactics and threats in order to reach their desired goals (Jambroes et al., 2018; Jonason et al., 2012), but would be less likely to react to provocation due to a blunted fear response (Thompson et al., 2021), immunity to stress (Du et al., 2022; Vergauwe et al., 2021; Wallace et al., 2022 [Chapter 3]), and better response inhibition (Selbom et al., 2022).

Cognitive skill as an outcome of SP

One of the long-debated arguments within the field of psychopathy is whether individuals with high psychopathic traits experience deficits in cognitive skill or executive functioning, as well as which EF may be impaired and which traits may predict this (Burghart et al., 2023). Response inhibition is an aspect of Executive Functioning (EF), which in turn can be defined as a set of behavioural controls encompassing response inhibition, task monitoring, rule learning, and planning (for a review see; Salthouse, 2005). Prevailing research emphasises the significance of a person's capacity to exert EF in order to control the expression of violent behaviour, inappropriate drug use, harmful antisocial behaviour, short-sighted reward seeking, as well as engage in prosocial behaviours, such as complex social interactions (e.g., making inferences about others' behaviours and preferences; Rueda et al., 2005).

Unsurprisingly, EF dysfunctions are linked to behavioural abnormalities when people engage in actions that have negative results. However, for all personality subtypes exhibiting

this kind of behaviour, most notably individuals with high psychopathic traits, a strong link between EF and maladaptive behaviour is not immediately obvious. Individuals with high psychopathic traits have a callous, cold-hearted response to social and emotional issues as well as the propensity for impulsive and antisocial behaviour (Hare, 1999). Results, however, are conflicting on the association between EF deficiencies and psychopathy (Hart et al., 1990; Morgan & Lilienfeld, 2000; Ogilvie et al., 2011; Smith et al., 1992). Conversely, previous research exploring the theoretical concept of successful psychopathy note that one potential moderating factor could be intact executive or cognitive functioning (Ishikawa et al., 2001). In accordance with these previous studies, using now disputed definitions (see Chapter 1), so-called “successful psychopaths” can channel their otherwise antisocial tendencies into socially constructive outlets by means of response inhibition, abstract reasoning, planning, and problem-solving (Ishikawa et al., 2001; Ross et al., 2007; Widom, 1977). Furthermore, following on from the work of Cleckley (1941) and Loney et al. (1998), and their suggestion that prototypical psychopathy may not be related to cognitive deficits, and hallmark traits could potentially include higher verbal, practical, and analytic skills, could lend support for the successful psychopathy subtype and the existence of moderating factors which delineate outcomes from the psychopathic personality.

The chapter aims to demonstrate the predictive validity of the Successful Psychopathy Scale (SPS; Wallace et al., 2022 [Chapter 4]) in relation to aggression, cognitive skill, and attachment style, as well as prominent predictors of psychopathy (both prototypical and successful), such as empathy and childhood experience. The study within this chapter used a cross-sectional design with regression analyses to test the hypotheses that higher levels of successful psychopathy would predict lower levels of reactive aggression and relationship deficits, as well as higher levels of cognitive skill and proactive aggression. Moreover, this study predicts that adverse childhood events will have a negative relationship with successful

psychopathy, and higher instances of benevolent childhood events and higher levels of cognitive empathy will predict higher scores on successful psychopathy.

Methods

Participants

The sample size was derived from previous similar studies of exploring scale validity (e.g., Blagov et al., 2016, N = 120; Durand, 2019, N = 263; Williams et al., 2003, N = 274). In total, 255 participants ($M_{\text{age}} = 38.5$ years, $SD = 12.8$, range = 18 to 71, 49.8% male) responded to and completed an online survey distributed via the crowdsourcing website Prolific. Although it does not overcome the general limitations of online research, Prolific is considered a viable means of participant recruitment (Peer et al., 2017). All participants were from the United Kingdom and were mostly married (38.4%) university graduates (36.1%), who were in full time employment at the time of taking part (43.9%). Inclusion criteria stated that participants needed to be fluent in English and over 18 years of age. The use of the blacklist feature in Prolific ensured that participants who completed this study had not completed any other study in this thesis and so all participants were naïve to the materials. All participants who completed the survey were reimbursed for their time at an average rate of £6 per hour.

Measures

Demographics Participants were asked to provide their sex, age, employment status, relationship status, and educational attainment.

Successful Psychopathy Scale (SPS; Wallace et al., 2022) is a 54-item self-report measure, based on a 6-factor structure. The measure has 6 subscales which assess three distinct groups of traits associated with Successful psychopathy in general population samples (i.e., interpersonal, affective, and behavioural). The subscales are: Callous-

Unemotional Traits (12 items), Social Potency (12 items), Confidence (8 items), Risk Taking (9 items), Stress Immunity (8 items), and Manipulation (5 items). All items are measured on a 5-point Likert scale ranging from Strongly Agree to Strongly Disagree. The SPS showed high reliability for the total scale ($\alpha = .90$) and the subscales; Core Psychopathy ($\alpha = .85$), Social Potency ($\alpha = .89$), Confidence ($\alpha = .79$), Risk Taking ($\alpha = .82$) and Stress Immunity ($\alpha = .85$). The final subscale of Manipulation demonstrated good reliability ($\alpha = .65$). Full scale can be found in Chapter four.

The Triarchic Psychopathy Measure (TriPM; Patrick et al., 2010) is a 58-item, self-report questionnaire, which consisting of three distinct phenotypic components including Boldness (19 items, e.g., “I am well-equipped to deal with stress”), Meanness (19 items, e.g., “I don't have much sympathy for people”), and Disinhibition (20 items, e.g., (“I get in trouble for not considering the consequences of my actions”). The TriPM is measured using a 4-point Likert scale from 3 (True) to 0 (False). Seventeen items were reversed scored; scale totals were calculated with higher scores indicating higher levels of psychopathic traits. The TriPM demonstrated high reliability for the total scale ($\alpha = .88$) and the subscales of Boldness ($\alpha = .86$), Meanness ($\alpha = .88$), and Disinhibition ($\alpha = .90$).

Adverse Childhood Events (ACE; Felitti et al., 1998) is a 10-item checklist of negative experiences between 0-18 years. Items pertain to emotional abuse, physical abuse, sexual abuse, physical neglect, separation from parents, acts of violence against the mother, overuse of alcohol or drug abuse, psychological illness or suicide attempt of a family member, and imprisonment of a family member. The answers are dichotomous ranging from 0 (“No”) to 1 (“Yes”), and each affirmative answer scores one point.

Benevolent Childhood Events (BCE; Narayan et al., 2015), a 10-item checklist of positive experiences between ages 0–18 years. Items pertained to perceived relational and

internal safety and security (e.g., “at least one safe caregiver, beliefs that gave comfort”), positive and predictable quality of life (e.g., “enjoyment of school, regular meals and bedtime”), and interpersonal support (e.g., “a teacher who cared, a supportive non-caregiver adult”). The answers are dichotomous ranging from 0 (“No”) to 1 (“Yes”), and each affirmative answer scores one point.

Experiences in Close Relationships (ECR- R; Fraley & Shaver, 2000) is a 36-item self-report measure used to assess attachment behaviour in a 1–7 (strongly disagree to strongly agree) Likert-type format. Eighteen items measure attachment avoidance (e.g., “I prefer not to be too close to romantic partners”) and the other 18 items measure attachment anxiety (e.g., “I worry a lot about my relationships”). The scale demonstrated high reliability for each of the sub-scales, anxiety dimension ($\alpha = .94$), and ($\alpha = .95$) for the avoidance facet.

Reactive Proactive Aggression (RPQ; Raine, 2006) is a 23-item, self-report questionnaire of which 12 items make up the proactive subscale (e.g., “How often have you got others to gang up on someone else?”) and 11 make up the reactive subscale (e.g., “How often have you got angry or mad or hit others when teased?”). The scale demonstrated excellent reliability for its total ($\alpha = .87$) and its sub-scales, reactive ($\alpha = .82$), proactive subscale ($\alpha = .83$).

Questionnaire of Cognitive and Affective Empathy (QCAE; Reniers et al., 2011) is a 31-items self-report questionnaire, in which 19 items make up cognitive empathy (e.g., “I am good at predicting how someone will feel”) and 12 make up affective empathy (e.g., “It worries me when others are worrying and panicky”). For the QCAE, respondents indicate their level of agreement with each item by selecting one of four response options, ranging from Strongly Agree (4) to Strongly Disagree (1). Higher scores indicate greater levels of empathy. Possible Cognitive Empathy scores range from 19 to 76, while possible Affective Empathy scores range

from 12 to 48. QCAE demonstrated high reliability for each of the components of Cognitive Empathy ($\alpha = .91$) and Affective Empathy ($\alpha = .82$).

Self-Report Measure of Cognitive Abilities (SRMCA; Jacobs & Roodenburg, 2014)

is a 19-item self-report measure of self-estimated cognitive function. These items measured the ability areas of fluid ability (Gf) representing abstract problem solving, crystallised ability (Gc) representing the depth and breadth of applied knowledge and learning, and visual processing (Gv) which encapsulates an ability to generate, perceive and analyse visual patterns and stimuli. For each item of the SRMCA, participants rated how difficult or easy it is to perform particular types of cognitive tasks (e.g., understand written instructions) in comparison to “most people their age”. Response options were as follows: 1 (*extremely difficult*); 2 (*difficult*); 3 (*somewhat difficult*); 4 (*manageable*); 5 (*somewhat easy*); 6 (*easy*); and 7 (*extremely easy*). The SRMCA demonstrated high reliability for each of its respective subscales of Fluid Ability ($\alpha = .87$), Crystallised Ability ($\alpha = .87$), and Visual Processing ($\alpha = .92$).

Procedure

Participants provided written informed consent by ticking a box on the first and last pages the survey in accordance with British Psychological Society ethical standards for internet-mediated research. This research was approved by an institutional ethical review panel prior to data collection. Following this, the participants were presented with demographic questions and a battery of psychometric measures; presented in a randomised order to reduce any impact of response order bias. On average, this study took around 12 minutes to complete. In addition, this study has a follow up pilot behavioural task which participants could opt to take part in following their completion of this survey. The behavioural task and associated results will be discussed in Chapter 7.

Statistical Analyses

Collected data were screened for outliers and the assumptions of parametric tests. Second, correlations between successful psychopathy, prototypical psychopathy, aggression, adverse and benevolent childhood experience, empathy, anxiety and avoidance in close relationships, and cognitive skill were conducted. Third, hierarchical analyses were conducted to assess whether each of the included variables account for more variance than either sex or age alone in linear models.

Results

Descriptive Statistics and Sex Differences

Means and standard deviations for demographic and questionnaire data are reported in Table 6.1. Independent *t*-tests were used to delineate sex differences within the sample. Males reported greater levels of successful psychopathy ($t(251) = 4.66, p < .001, d = 0.59$) and prototypical psychopathy ($t(251) = 6.11, p < .001, d = 0.77$) than females, and also more proactive aggression ($t(251) = -2.91, p < .005, d = 0.37$), lower affective empathy ($t(251) = -4.89, p < .001, d = -0.61$), cognitive empathy ($t(251) = -2.60, p = .005, d = .45$), fluid ability ($t(251) = 1.86, p = .032, d = -0.23$), and visual ability ($t(251) = 2.48, p = .007, d = -0.31$). The effect sizes were mostly small, apart from affective empathy which demonstrated a large effect size.

There were no significant differences in adverse childhood experiences ($t(251) = -1.37, p = .085, d = -0.19$), benevolent childhood experiences ($t(251) = -1.43, p = .77, d = -0.15$), relationship anxiety ($t(251) = -.755, p = .225, d = -0.9$), relationship avoidance ($t(251) = -1.7, p = 0.44, d = -0.46$), crystallised ability ($t(251) = .834, p = .202, d = -0.14$), between males and females.

Table 6.1*Descriptive Statistics for Key Variables Between Male and Female Participants*

Variable	<i>n</i>	Mean (SD)	Males M (SD)	Females M (SD)	<i>t</i> -tests	α
Age	255	38.48(12.89)	38.46(13.38)	38.50(12.43)	-.027	-
SPS Total	255	149.27 (25.59)	156.51 (24.96)	142.05 (24.40)	4.65**	.90
SPS CU	255	23.67(7.38)	25.63 (6.95)	21.63 (7.34)	4.45**	.85
SPS Social Potency	255	37.05 (8.91)	37.85 (9.20)	36.30 (8.63)	1.37	.89
SPS Confidence	255	27.81 (5.20)	27.97 (5.91)	27.72 (4.40)	.38	.79
SPS Risk-Taking	255	24.46 (6.62)	26.70 (6.14)	22.21 (6.39)	5.69**	.82
SPS Stress Immunity	255	23.16 (6.20)	24.54 (6.25)	21.76 (5.88)	3.63**	.85
SPS Manipulation	255	13.09 (3.53)	13.80 (3.53)	12.40 (3.40)	3.20*	.65
TriPM Total	255	54.19(18.75)	60.84 (16.80)	47.33 (18.31)	6.11**	.90
TriPM Boldness	255	26.06 (9.11)	28.22 (9.14)	23.88 (8.67)	3.86**	.86
TriPM Meanness	255	12.08 (8.09)	14.80 (7.30)	9.23 (7.93)	5.80**	.88
TriPM Disinhibition	255	16.04 (8.76)	17.81 (9.12)	14.20 (8.07)	3.33**	.86
ACE	255	1.87 (2.09)	1.68 (2.21)	2.04 (1.96)	-1.37	.75
BCE	255	7.77 (2.15)	7.99 (1.94)	7.61 (2.28)	1.43	.73
RPQ Reactive	255	7.27 (3.73)	7.84 (3.93)	6.72 (3.46)	2.40	.82
RPQ Proactive	255	1.46 (2.52)	1.92 (2.76)	1.01 (2.18)	2.91*	.83
QCAE Cognitive	255	2.91 (.454)	2.84 (.46)	2.99 (.42)	-2.60	.91
QCAE Affective	255	2.76 (.471)	2.63 (.41)	2.90 (.48)	-4.89**	.82
ECR-R Anxiety	255	62.22 (23.32)	61.15 (24.45)	63.38 (22.33)	-.75	.94
ECR-R Avoidance	255	59.20 (22.02)	56.66 (20.85)	61.37 (22.91)	-1.71	.95
SRMCA Fluid	255	24.39 (4.71)	24.95 (4.49)	23.84 (4.90)	1.86	.87
SRMCA Crystallised	255	30.93 (6.08)	31.23 (6.13)	30.59 (6.08)	.83	.87
SRMCA Visual	255	39.34 (9.32)	40.77 (9.57)	37.88 (8.92)	2.48	.92

Note. SPS = Successful Psychopathy Scale, TriPM = Triarchic Psychopathy Measure, ACE = Adverse Childhood Experiences, BCE = Benevolent Childhood Experiences, RPQ = Reactive Proactive Questionnaire, QCAE = Questionnaire of Cognitive and Affective Empathy, ECR-R = Experiences in Close Relationships *revised*, SRMCA = Self-report measures of Cognitive Abilities. * $p < .05$, ** $p < .001$.

Correlations

Bivariate correlations are shown in Table 6.2. Successful psychopathy was positively associated with boldness and meanness (TriPM), benevolent childhood experiences (BCE), proactive aggression (RPQ), cognitive empathy (QCAE), and each of the facets of cognitive skill (SRMCA). Moreover, successful psychopathy was negatively associated with affective

empathy, anxiety, and avoidance behaviours in close relationships. It is also worth noting that prototypical psychopathy, as measured by the TriPM, was positively related to both proactive and reactive aggression, adverse childhood experiences, anxiety, and significant negative associations with both facets of empathy, and benevolent childhood experiences. Prototypical psychopathy (TriPM) also shared a positive relationship with cognitive skill, however this presented considerably weaker correlations when compared to successful psychopathy.

Table 6.2
Correlations For All Continuous Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1. Successful Psychopathy	-	.52**	.79**	.62**	.79**	.61**	.65**	.65**	.85**	.43**	.11	-.06	.18**	.04	.23**	.24**	-.30**	-.18**	-.19**	.52**	.39**	.33**
2. <i>CU Traits</i>		-	.18**	-.05	.30**	.05	.61**	.72**	.25**	.81**	.53**	.04	-.14*	.32**	.40**	-.26**	-.40**	.15*	.12*	.09	.01	.15*
3. <i>Social Potency</i>			-	.49**	.55**	.37**	.44**	.42**	.71**	.11	.04	.05	.14*	.07	.19**	.44**	.02	-.07	-.19**	.44**	.37**	.17**
4. <i>Confidence</i>				-	.44**	.47**	.24**	.08	.60**	-.06	-.37**	-.19**	.33**	-.24**	-.08	.30**	-.08	-.33**	-.27**	.51**	.42**	.28**
5. <i>Risk-Taking</i>					-	.44**	.40**	.57**	.73**	.31**	.18**	-.00	.14**	.06	.21**	.16**	-.26**	-.21**	-.22**	.48**	.27**	.29**
6. <i>Stress Immunity</i>						-	.12*	.24**	.67**	.10	-.27**	-.22**	.24**	-.29**	-.08	.20**	-.38**	-.39**	-.19**	.37**	.36**	.32**
7. <i>Manipulation</i>							-	.54**	.38**	.48**	.31**	-.04	.05	.18**	.24**	.07	-.15*	.10	.00	.16**	.21	.14*
8. TriPM								-	.61**	.83**	.72**	.17**	-.13*	.39**	.55**	-.09	-.36**	.17**	.07	.27**	.14*	.21**
9. <i>Boldness</i>									-	.27**	.30	-.01	.15*	-.02	.18**	.32**	-.28**	-.19**	-.18**	.55**	.42**	.35**
10. <i>Meanness</i>										-	.57**	.06	-.14*	.35**	.45**	-.33**	-.47**	.14*	.14*	.11	.05	.15*
11. <i>Disinhibition</i>											-	.34**	-.32**	.53**	.57**	-.21**	-.03	.42**	.21**	-.09	-.17**	-.05
12. <i>Adverse Childhood</i>												-	-.53**	.28**	.28**	-.01	.09	.30**	.22**	.03	-.11	-.05
13. <i>Benevolent Childhood</i>													-	-.21**	-.22**	.16**	.00	-.30**	-.34**	.10	.18*	.10
14. <i>Reactive Aggression</i>														-	.56**	-.13*	.01	.31**	.17**	-.04	-.13*	-.04
15. <i>Proactive Aggression</i>															-	-.06	-.08	.18**	.05	.04	-.04	.09
16. <i>Cognitive Empathy</i>																-	.38**	-.00	-.20**	.34**	.23**	.17**
17. <i>Affective Empathy</i>																	-	.24**	-.04	-.13*	-.11	-.19**
18. <i>ECR_R Anxiety</i>																		-	.569**	-.11	-.17**	-.12*
19. <i>ECR_R Avoidance</i>																			-	-.16**	-.16*	-.13*
20. <i>SRMCA Fluid</i>																				-	.50**	.43**
21. <i>SRMCA Crystallised</i>																					-	.39**
22. <i>SRMCA Visual</i>																						-

Note. * $p < .05$, ** $p < .01$. **In Bold:** Successful psychopathy is built of variables 2 through 7, TriPM is built of variables 9 through 11.

Hierarchical Multiple Regressions

To further explore the relationship between successful psychopathy and proactive aggression, hierarchical regressions were conducted to ensure that age and sex were not controlling this relationship (see Table 6.3). In Model 1, results demonstrated that age and sex were both negative predictors of proactive aggression, $F(2, 252) = 5.33, p < .005$, with an R^2 of .033. However, when adding in successful psychopathy in Model 2 the negative relationship between sex and age and proactive aggression remains negative but is no longer significant. Additionally, successful psychopathy is still shown to be a positive predictor of proactive aggression, $F(2,254) = 7.01, p < .001$, with an R^2 of .066. Therefore, this suggests that age and sex are not masking the positive relationship between successful psychopathy and proactive aggression.

Table 6.3

Hierarchical Regression Model of Proactive Aggression

	<i>R</i>	<i>R</i> ²	<i>R</i> ² Change	<i>B</i>	<i>SE</i>	β	<i>t</i>
Step 1	.201	.033					
Age				-.018	.012	-.090	-.146
Sex				-.905	.311	-.180*	-2.91
Step 2	.278	.066	.037**				
Age				-.017	.012	-.086	-1.41
Sex				-.621	.318	-.123	-1.95
Successful Psychopathy				.020	.006	.200**	3.16

Note. * $p < .05$, ** $p < .001$.

In addition, it was important to delve further into the relationship between successful psychopathy and anxiety, to ensure that age and sex were not controlling this relationship (see Table 6.4). In Model 1, results demonstrated that age and sex were not significant

predictors of anxiety, $F(2, 252) = 5.88, p = .008$, with an R^2 of .030. However, when adding in successful psychopathy in Model 2 the model becomes significant and negatively predicts anxiety, $F(3,251) = 6.28, p < .001$, with an R^2 of .059, and accounts for 5.9% of the variance in successful psychopathy scores. Therefore, this suggests that age and sex are not key predictors in reducing relationship anxiety, however when conducting the regression using avoidance, neither model was significant suggesting there is another factor accounting for variance in avoidance scores beyond successful psychopathy, age, or sex.

Table 6.4

Hierarchical Regression Model of Anxiety

	<i>R</i>	<i>R</i> ²	<i>R</i> ² Change	<i>B</i>	<i>SE</i>	β	<i>t</i>
Step 1	.193	.030					
Age				-.338	.112	-.187*	-3.01
Sex				2.33	2.87	.050	.812
Step 2	.264	.059	.033				
Age				-.346	.110	-.191*	-3.13
Sex				-.139	2.95	-.003	-.047
Successful Psychopathy				-.171	.058	-.188*	-2.96

Note: * $p < .05$, ** $p < .001$.

Predictors of Successful Psychopathy

To further explore the relationship between cognitive empathy and successful psychopathy, a hierarchical regression was conducted to ensure that age and sex were not controlling this relationship. In Model 1, results demonstrated that age and sex negatively predicted high levels of successful psychopathy, $F(2, 252) = 11.05, p < .001$, with an R^2 of .073. However, when adding cognitive empathy into Model 2, the results show a positive relationship predicting successful psychopathy, being driven by cognitive empathy, $F(3,251) = 16.67, p < .001$, with an R^2 of .156. Therefore, this demonstrates that Model 1 accounts for

7.3% of the variance in negatively predicting successful psychopathy scores, whereas Model 2 accounts for 15.6% of the variance in positively predicting successful psychopathy scores.

Table 6.5
Hierarchical Regression Model of Successful Psychopathy

	<i>R</i>	<i>R</i> ²	<i>R</i> ² <i>Change</i>	<i>B</i>	<i>SE</i>	β	<i>t</i>
Step 1	.284	.073					
Age				-.048	.120	-.024	-.397
Sex				-14.45	3.08	-.283**	-4.68
Step 2	.408	.156	.086**				
Age				-.034	.114	-.017	-.300
Sex				-16.84	2.98	-.330**	-5.64
Cognitive Empathy				16.69	3.28	.296**	5.07

Note. ** $p < .001$.

Discussion

The current study explored both psychological predictors of successful psychopathy and relevant outcomes that successful psychopathy may predict. Within, I found relationships between successful psychopathy and childhood experience, aggression, empathy, relationship experience, and cognitive skill. Critically, these relationships were generally positive and fit within the wider literature, in that those who scored high on successful psychopathy tended to have fewer adverse childhood and relationship experiences, demonstrated cognitive empathy, displayed proactive but not reactive aggression, and had sound cognitive skill. It is also of interest that those scoring higher on prototypical psychopathy experienced more adverse relationships, both in childhood and adulthood, displayed high levels of reactive aggression, and had reduced empathy across both facets. Overall, these results suggest there are existing psychopathy subtypes which are built around the same core components, however by

demonstrating a more muted manifestation, buffered by adaptive traits and certain external factors, the outcome behaviours between these individuals can vary widely.

Childhood

According to theory and empirical research, psychopathy may be linked to a history of ACEs. Among the historical studies addressing the heterogeneity of psychopathy, Porter (1996) proposed, that primary psychopathy principally reflects a congenital affective deficit, whereas secondary psychopathy primarily reflects a distancing of emotions caused by negative childhood experiences and acquired affective disorders. Traits associated with “secondary psychopathy”, such as impulsivity, erratic behaviour, and reactive aggression have commonly been associated with adverse childhood experiences (Anda et al., 2006; Dargis & Koenigs, 2017a; 2017b; DeLisi et al., 2018; Forouzan & Nicholls, 2015; Marshall & Cooke, 1999; McCartney et al., 2001; Schwarts et al., 2019; Weizmann-Henelius et al., 2004; Wolff & Baglivio, 2016; Zettler et al., 2017; Zlotnick et al., 2008). Within the SPS, traits associated with these manifestations are not present, as they do not fit within an adaptive perspective of successful psychopathy, therefore the lack of relationship between ACEs and successful psychopathy was expected. Moreover, the results indirectly support the theoretical conceptions of psychopathic subtypes, and as a result examining childhood experiences and the various conceptualised or theorised sub-types of psychopathy is crucial for both research and the development of interventions.

Furthermore, some empirical research suggests that specific environmental factors, particularly a lack of parental warmth and affection, can influence the development of CU traits. Previous studies, for example, have found that children raised by parents who exhibit low levels of affection, warmth, and positive reinforcement are more likely to develop CU traits (Pardini et al., 2007; Pasalich et al., 2016). These previous findings are supported

within this study as adverse childhood events were found to predict higher scores of prototypical psychopathy, and reduced childhood adversity and higher levels of positive childhood experiences predicted more adaptive or successful psychopathy. Moreover, this is supported by previous literature indicating stable childhood experience as a buffering factor against maladaptive outcomes (Backman et al., 2021). Overall, benevolent and adverse experiences had differential impacts on psychopathy, and results were consistent with current directions investigating CU traits in children that indicate overly affectionate parental styles can help alter the outcomes for children with high levels of these traits (Kroneman et al., 2011; Pasalich et al., 2011; Waller et al., 2013), which has the potential to differentiate the psychopathy subtypes during early development, which has a later impact on adult close relationships, influencing attachment styles such as anxious and avoidant.

Empathy

Regardless of how empathy is cognitively mediated, the emotional congruence is a fundamental component based on early research (e.g., Feshbach, 1975). Additionally, prior studies which hypothesised that empathy would play a role in reducing aggressive behaviour such as Feshbach (1975) and Hoffman (1982), emphasised the significance of the emotional component of empathy. In other words, affective empathy promotes altruistic behaviour while inhibiting selfish behaviour. However, empathy is thought to be essential for the development of positive moral reasoning and prosocial behaviour in both its affective and cognitive forms (Jolliffe & Farrington, 2006). The mechanisms of high affective empathy aids individuals in carrying out altruistic behaviours due to the positive emotions this evokes (Batson et al., 1987), whereas high cognitive empathy provides the initial ability to differentiate the affective cues of another person. In addition to promoting prosocial conduct, cognitive empathy or perspective-taking abilities can also lessen aggressive and violent behaviour (Chalmers & Townsend, 1990). On the other hand, a turbulent and sometimes

hostile lifestyle might result from a lack of good perspective-taking abilities and inattention to others' emotional cues and sentiments (Dymond, 1950).

More recently, this lack of empathy has been regarded as a core feature of a psychopathic personality (Smith & Lilienfeld, 2015). Prior research, however, has yielded conflicting results on the relationship between cognitive and affective empathy and psychopathic traits in community samples. There are three potential explanations for this variation in results which are supported with the field (for review *see* Mullins-Nelson et al., 2006). Firstly, the majority of these studies were conducted on forensic populations and used a “lack of detection” as the community sample which does not fit with more recent conceptualisations of both prototypical and successful psychopathy, and in order to understand psychopathy and empathy in legitimate general population samples (e.g., student samples, professionals, non-criminal), further research is required (Hall & Benning, 2006; Skeem et al., 2003). Secondly, there is the issue of the multidimensionality of psychopathy and a lack of construct consensus (Benning et al., 2005), and finally, there has long been concern about the heterogeneity of empathy which is not yet resolved (Feshbach, 1989).

Findings within this current study indicate that individuals who scored high on successful psychopathy no negative associations with cognitive empathy but had negative associations with affective empathy, while individuals who scored high on prototypical psychopathy showed deficits in both cognitive and affective empathy. Furthermore, the current study's findings roughly correspond to Cleckley's (1941) clinical theory of psychopathy, implying that psychopathic individuals may be able to use their emotions to guide their own behaviour and to read the emotions of others (i.e., perspective taking). However, affective empathy deficits seem do not appear to vary depending on the type of psychopathy assessed (e.g., prototypical, or successful), lending further support to the idea

that it is a distinct lack of affective empathy that makes the psychopathy construct (Bergström et al., 2021), regardless of sub-type.

As a result, adaptive traits and psychopathy sub-types may be important in understanding the emotion paradox of psychopathy. These characteristics could explain why some individuals with high psychopathic traits can use cognitive computations to infer the mental states of others (i.e., intact cognitive empathy), while masking their inability to share others' emotional states (i.e., impaired affective empathy). This enables them to mimic normal human interactions and use these characteristics to deceive and manipulate others for their own benefit (Babiak et al., 2007). Moreover, individuals with high successful psychopathic traits within certain settings (e.g., corporate) may have different methods of communicating and persuading others in order to overcome any potential detriments to their careers (Babiak et al., 2010). One such example of this could be the type of aggression implemented.

Aggression

Aggression is defined as behaviour aimed at harming or injuring another living being who is driven to avoid such treatment. It is a natural and adaptive component of the mammalian social behavioural repertoire. However, it can become maladaptive if it is overdone, persistent, or stated out of context (Connor et al. 2006; Nelson & Trainor 2007). There exists a dimensionality to aggression which is research across a variety of forms, such as instrumental and impulsive and reactive and proactive. The latter of which was the construct chosen for this study. Previous research showing different correlates of the two types of aggression have provided additional evidence supporting a distinction between reactive and proactive aggression.

Reactive aggression has been associated with; early physical abuse, early problematic behaviour, difficulties with attention, impulsivity, peer rejection, victimisation, and

internalisation (Barry et al., 2007; Card & Little, 2006; Dodge et al., 1997; Lamarche et al., 2007; Salmivalli & Helteenvuori, 2007; Schwartz et al., 1998). Proactive aggression, on the other hand, has been linked to core psychopathic traits, (Blair, 2003; Raine et al., 2006), leadership qualities (Poulin & Bouvin, 2000), and a sense of humour (Dodge & Coie, 1987). This type of aggressive behaviour requires planning and preparation, and autonomic arousal is thought to be minimal, with goal-directed behaviour. Moreover, members of a peer group or colleagues may tolerate and accept proactive aggressive behaviours, not only because they supply some forms of social control that the group values, but also because they may grant the individual power, allowing them access to sought resources (Boivin et al., 1995).

Successful psychopathy was unrelated to reactive aggression and incrementally predicted high proactive aggression, whereas prototypical psychopathy was a high predictor of both proactive and reactive aggression. Our results are consistent with the findings that successful psychopathy is associated with verbal aggression, grandiose manipulative traits, Machiavellian features such as the desire for control/status (Fanti et al., 2016), and non-physical victimisation (Gatner et al., 2016). This finding supports the notion that traits within the psychopathy construct may represent a different pathway to maladaptive behaviour or a protective factor in terms of prosocial outcomes (Drislane et al., 2014; Lilienfeld et al., 2015a), and successful psychopathy could play a key role in this. Moreover, this is of importance as it highlights the potential tactical differences between prototypical psychopathy and successful psychopathy with regard to the manifestation of aggression, which could be a key defining factor between the two. In addition, considering aggression tactics as a differentiator between the two psychopathy sub-types raises another question of what mechanisms predict this difference.

Cognitive Skill

Ishikawa et al. (2001) and Gao and Raine (2010) highlight the neurobiological distinctions between successful and unsuccessful high-psychopathy individuals. They contend that these neurological differences result in greater cognitive empathy, better information processing, and higher autonomic reactivity levels in those with high levels of psychopathy who are successful (defined as not convicted of a crime) compared to those with high levels of psychopathy who are unsuccessful (Gao & Raine, 2010; Ishikawa et al., 2001). Although it was beyond the scope of this study to examine all mechanisms of cognition and executive functioning, the results from the SRMCA (Jacobs & Roodenburg, 2010) showing successful psychopathy to be strongly positively associated with better planning, reasoning, abstract thinking, and visualisation of patterns or problems, maps onto the previous findings.

Gao et al. (2011) goes on to argue that neurological differences, such as higher P3 amplitudes (electrophysiological indices of higher-order cognitive skills measured by recorded from the scale using electroencephalography; Polich, 2007), can distinguish between successful and unsuccessful people with high levels of psychopathy. Furthermore, Yang et al. (2010) presents evidence that the prefrontal cortex, which is implicated in executive functioning and personality expression, and the amygdala, which is integral to emotions and emotion-driven behaviour, are more structurally deficient in those with high levels of psychopathy who are unsuccessful compared to those with low levels of psychopathy who are successful. Compromises to such structures likely contribute to poorer higher-order thinking and decision making in individuals with prototypical psychopathy. These differences also suggest that an “unsuccessful psychopath” may have difficulty in processing cues within risky situations and may struggle with decision making (Damasio, 1994). As a result, the “successful psychopath” who has intact functioning may be more able

to avoid conviction, whereas the unsuccessful psychopath who lacks enhanced decision making during his criminal endeavours may be more prone to apprehension and conviction. However, it is worth noting that the conceptualisation of successful psychopathy within these previous experimental parameters was based on convictions and criminal activity, and the labels of “successful” and “unsuccessful” psychopath should be used with caution to avoid both stigmatisation of the personality construct and suggesting a discrete class or taxon exists.

Regarding the ways in which psychopathy manifests at the level of antisocial behaviour, individuals with high successful psychopathic traits are thought to be particularly prone to pathological lying and deception, conning, and interpersonal manipulation as facilitated by their intact or even enhanced functioning, psychophysiological, and cognitive characteristics. Their improved executive functioning and intact somatic markers (Ishikawa et al., 2001), as well as their hypothesised good cognitive empathy, are thought to give some people an inherent advantage over others in terms of their ability to con and manipulate (Gao & Raine, 2010). If individuals scoring high on successful psychopathy do not demonstrate the executive functioning and cognitive deficits traditionally thought to be risk factors for psychopathy, this calls us to question what the risk factors for successful psychopathy are and could this be further explored by examining psychosocial processes. Such examples could be life history, coping styles, and substance use, as well as using different measures to look at family history, early development, and experimental tasks using the recently developed conceptualisation of successful psychopathy, not reliant on criminal activity.

Limitations and Future Directions

Despite the promising findings within this study, there are limitations to consider. First, the participants were quite heterogenous. Recruitment-wise, no eligibility restrictions were established in terms of education, relationship status, or upper-age limit. Second, while

self-reported surveys are widely employed in the study of personality, experimental as well as longitudinal data would be beneficial to confirm the SPS's validity in assessing successful psychopathy in practice and help to overcome some of the limitations with cross-sectional research such as common method variance and inability to demonstrate causal links (Spector, 2019). Future research should, for example, focus on SPS measures and risk taking in a behavioural task to further investigate the cognitive distinctions between successful psychopathy and prototypical psychopathy. Moreover, as there are several conflicting viewpoints on the constructs of empathy and aggression, it would be beneficial to explore different psychometric measures of these traits, such as the Buss-Perry Aggression Questionnaire (BPAQ; Buss & Perry, 1992). This will allow validation of the scale using different parameters of aggression (e.g., physical aggression, verbal aggression, anger, and hostility) which may help tease apart prototypical and successful psychopathic trait manifestations. Moreover, it would be useful to expand to alternate measures of empathy such as the Affective and Cognitive Measure of Empathy (ACME; Vachon & Lynam, 2016) as this goes beyond standard affective and cognitive measures and begins to interpret resonance and dissonance within the constructs.

Finally, while this newly constructed measure examines the adaptive qualities most typically linked with primary or Factor 1 psychopathy, it should not be used to make clinical diagnoses of psychopathy. This questionnaire analyses a subset of psychopathy-related features, both adaptive and possibly maladaptive, in order to gain a better understanding of how some of the key traits linked with the psychopathic personality may be advantageous in the general population. Nevertheless, this study gave several insights regarding the predictive validity of the SPS in a general population sample.

Conclusion

This chapter informed new understandings of the potential predictors and outcome behaviours associated with successful psychopathy when compared to prototypical psychopathy. Furthermore, it demonstrates the potential predictive validity of the newly developed Successful Psychopathy Scale (Wallace et al., 2022; [Chapter 4]). This is important in expanding our understanding of the psychopathic personality and relevant subtypes within the construct, furthermore, it adds crucial empirical support to the theoretical models of successful psychopathy (Hall & Benning, 2006), namely Differential-severity, Differential-trait, and Moderated-expression.

Chapter 7. Generalisability Study

Introduction

Successful psychopathy is underpinned by three distinct theoretical models developed by Hall & Benning (2006) and further elaborated on by Lilienfeld et al. (2014). First, successful psychopathy is a sub-clinical kind of psychopathy (e.g., a less severe manifestation of the construct). Second, using the dimensional approach, successful psychopathy consists of a different configuration of traits, where archetypal and successful psychopathy relate to different configurations of heightened attributes. Third, successful psychopathy can be thought of as a “moderated” manifestation, in which the trait composition is the same in both prototypical and successful psychopathy, but extra variables control the expression of the personality construct. Within this thesis, the empirical viability of these models has undergone initial exploration (see Chapters 4, 5, and 6) to determine an operationalised definition of successful psychopathy. Successful psychopathy can be defined as a construct, at the core of which are the affective characteristics associated with prototypical psychopathy, such as callousness, lack of regard for others, and reduced guilt and empathy. Nevertheless, this is alongside facets which ameliorate the outward projection of these qualities, such as confidence, social potency, and resistance to stress, and a notable absence of certain maladaptive experiences (e.g., adverse childhood) and outcomes (e.g., reactive aggression).

The Successful Psychopathy Scale (Wallace et al., 2022, see Chapter 4), is the first existing measure exploring levels of successful psychopathy within general population samples. Initial findings within this thesis demonstrated good internal consistency across both the 54-item version ($\alpha = .84$) and the short form ($\alpha = .77$), as well as good concurrent (see Chapter 4) and predictive (see Chapter 5) validity. The 30-item short form represents

characteristics covering affective (e.g., callousness, apathy, lack of empathy and guilt), interpersonal (e.g., confidence, use of manipulative tactics, social charm) and lifestyle (e.g., risk-taking and goal striving). Unlike prototypical psychopathy measures, the SPS does not outwardly assess aggression, antisocial behaviour, or criminal tendencies as these are considered correlates of the psychopathy profile (Cooke & Michie, 1997) and do not lend themselves to the updated definition of successful psychopathy put forth within this thesis and align themselves more closely with the clinical definition of psychopathy.

However, confusion between psychopathy as a condition or an individual characteristic may jeopardise the reliability and validity of self-report psychological assessments such as successful psychopathy, despite this operationalisation of the term. Therefore, it is critical to develop and implement reliable methods for distinguishing between the two; otherwise, therapeutic interventions, such as skills training, cannot be evaluated for their long-term success.

A trait is a relatively stable characteristic or permanent behavioural pattern that a person exhibits across various situations and contexts, whereas a state is an individual's experience in a specific instance, situation, or moment (Hamaker et al., 2007; Spielberger et al., 1970). A state is essentially determined by the interaction of person and circumstance and represents an individual's unique adaptation to the present moment and surroundings (Buss, 1989; Epstein, 1984). As successful psychopathy is a novel operationalisation of the construct, there are currently no interventions or workshops to target adaptive and maladaptive aspects of the construct, and relatively few interventions for prototypical psychopathy. Therefore, it is vital to comprehend both the dynamic and persistent aspects of such personality construct. This is best described by determining whether these qualities constitute a short-term experience (e.g., state) or a long-term pattern of behaviour (e.g., trait).

Generalisability Theory (G-Theory) is a data analytic technique for data collected using psychometric instruments (e.g., rating scales, performance tests). It is called G-Theory because it evaluates the extent to which a unique contribution of each single source of error variation can be generalised across all potential settings and contexts, as opposed to only a restricted amount of data acquired from a specific testing situation (Cronbach et al., 1963). G-Theory evaluates a variety of causes of variation that contribute to the measurement error linked with the main variable of interest (Allal & Cardinet, 1976). It is an extension of Classical Test Theory (CTT) that is based on the premise that every score consists of both true and error values, but it goes beyond that limitation by treating error variance as a single element (Allen & Yen, 1979).

More elements, such as personal (e.g., personality), methodological (e.g., psychometric properties of the test used), and situational (e.g., time of day), may each separately contribute to measurement error in naturally occurring contexts. G-Theory presents an advanced way for assessing these aspects and their interplay, hence improving methodology and the precision of an evaluation instrument. G-Theory uses repeated measures factorial analysis of variance (ANOVA) to evaluate the proportional contribution of several sources of variability to the overall measurement error, commonly known as noise (Brennan, 2001). Every such influence can be conveyed as an intra-class correlation coefficient (ICC) ranging from 0 to 1. An ICC is a reliability coefficient that expresses the ratio between the amount of variance in scores credited to the primary variable being measured and the total amount of observed variance. For instance, the amount of variance between successful psychopathy scores that is explained by differentiations between the participants can be represented as an ICC that reflects the discriminative ability of the Successful Psychopathy Scale as follows (Bloch & Norman, 2012).

In this case, ICC is determined by two things: the instrument's capacity to discriminate between participants and the quantity of noise caused by other contributing factors. ICC was first proposed in CTT as a somewhat different but essentially comparable calculation based on the concept of signal-to-noise ratio (SNR; Fisher, 1925). SNR is technically equal to the square of the effect size (ES²), which can be retrieved from any ANOVA study and reflects a ratio between consistent change (variance) in the X variable that corresponds to ΔX and overall variance (σ^2) in the data (Bloch & Norman, 2012). The greater the variance in a variable of interest (signal) in comparison to noise, the better the chances of detecting these changes correctly. An ICC close to 1 indicates that there is mostly a real difference connected to signal and relatively little noise, whereas an ICC close to 0 indicates that there was primarily noise or error in the data. In G-Theory terminology, ICC refers to a G-coefficient and expresses the ratio of the observed (true) variance owing to the object of measurement and the total variance of universe scores including the observed (true) variance and the error variance.

A G-coefficient is typically estimated for the variable of interest (e.g., trait successful psychopathy), but it can also be computed for each element contributing to error variance if a research design provides relevant data to analyse variability due to these contributions (Bloch & Norman 2012). In this scenario, the G-coefficient expresses the generalisability of specific components' influence across all potential circumstances and settings. G-Theory can be used to detect and compare the amount of variation explained uniquely by the person, the item, and the occasion, as well as their interactions (Bloch & Norman, 2012; Brennan, 2001). Person-occasion interaction variance is a direct reflection of the stateness of a latent construct, whereas person variance alone is a representation of a trait characteristic (Buss, 1989; Chaplin et al., 1988; Epstein, 1984). Importantly, G-Theory allows for this type of

analysis for the entire test, subscales, and even individual questions. In other words, real state items can be separated from non-truly responsive to occasion objects.

A G-study involves the estimation of variance associated with the object of measurement (e.g., people) and influencing factors (e.g., occasions). The variance components are computed using observed values from the universe of all conceivable (hypothetical) observations. Scales and individual items reflecting state are intended to reflect more variance due to person-occasion interaction and lower generalisability across occasions (e.g., $G < 0.70$) than reliable trait measurements, which are likely to have G of 0.80 or above (Ardinet et al., 2009; Arterberry et al., 2014). Traits, on the other hand, are the primary determinants of states via interaction with situational factors for the same latent construct, and a precise difference between state and trait can only be inferred based on their variance components using both G-Theory and the latent state-trait models (Geiser et al., 2015; Hamaker et al., 2007). However, G-Theory also permits to evaluate the overall reliability and generalisability of assessments scores and is preferable when examining the overall reliability of psychometric instruments (Bloch & Norman, 2012). There are currently no widely acknowledged standards for the relative proportions of state and trait components in a valid state measure, hence Medvedev et al. (2017) proposed the state component index (SCI) to quantify this relationship.

If measuring a trait, person-occasion interaction, which represents the variance component of a state, is simply the noise or error variation that impacts trait scores. SCI formula identifies the ratio of state to trait including noise in both, which we may assume to be equal because the trait (persons) component is the primary component of the state variance. To ensure measurement accuracy, the SCI computation should employ an absolute value of variation owing to person-occasion interaction determined from GT analysis that accounts for all known sources of error variance in the data. SCI is designed in accordance

with GT logic and is simple to understand. $SCI = 1.00$, for example, would imply that there is no trait component and that only individual state is recorded, which is practically improbable given that a trait is a primary predictor of a state (Buss, 1989; Epstein, 1984). $SCI = 0.50$ indicates that the state and trait components are the same, meaning therefore a scale cannot be defined as either a state or a trait measure. SCI above 0.50, on the other hand, reflect dominance of a state, with higher scores correlating to a stronger ability of an instrument to record state changes. Similarly, using the same metric, trait component index (TCI) can be used to validate trait measures using the inverse index. Therefore, more precise distinction between scales measuring states and traits can be made based on G-study results.

Examining test-retest reliability coefficients, which are predicted to be lower for a genuine measure of state (e.g., 0.60) and higher for a trait measure (e.g., > 0.70), has been the usual approach for proving discrete state and trait components in a scale, while latent state-trait models were rarely used to validate widely used psychometric scales (Ramanaiah et al., 1983; Spielberger et al., 1970; 1999). The main disadvantage of this strategy is that it is totally relied on total score correlations at Time 1 and Time 2. If linkages and distinctions between trait and state are to be given a solid, systematic, and resilient foundation, it is necessary to understand the various contributions to changes in trait and state by item effects, scale effects, person effects, and occasion effects as well as interactions between them.

Most crucially, the test-retest coefficient fails to account for variability owing to interaction between person and occasion, which is a major indicator of an individual's state changes (Buss, 1989; Chaplin et al., 1988; Epstein 1984). Simply said, we do not anticipate significant variation in trait ratings across contexts. The relationship between the individual and the event, on the other hand, is a condition by definition. To date, structural equation modelling (SEM) approaches such as latent state-trait models (e.g., Geiser et al., 2015; Hamaker et al., 2007; Kenny & Zautra, 2001) have been used to investigate state-trait

distinctions. However, none of the proposed SEM approaches is designed to examine the overall reliability and generalisability of assessment scores that requires to account for numerous sources of variation (e.g., an item) that contribute to measurement error associated with state and trait variability, limiting their application for state and trait measure validation. Such variations necessitate a more in-depth investigation into how aspects or components that can alter state and trait, including person and situation, can be quantified so that scale adjustments can be made.

Given the importance of developing adaptive traits to develop oneself over different life domains, it will be beneficial to understand more clearly how the overall scale and subscales of the SPS are working in terms of their state and trait characteristics. This may lead to more accurate understanding of successful psychopathy and the precision of psychopathy measurements in general in the future. G-Theory provides a profile of coefficients that permits differentiation between the stable and dynamic aspects of a measure and accounts for numerous sources of measurement error, namely those related to person factors, item factors, occasion factors, as well as their interactions (Medvedev et al. 2017; Truong et al. 2020). The current study used G-Theory to examine state and trait components of successful psychopathy and evaluate the temporal reliability and generalisability of the SPS scores. The G (generalisability) study investigated the overall generalisability of the SPS and SPS-SF scores and estimated a generalisability (G) coefficient, which is the ratio of the true (person) variance to the overall variance of scores (Cardinet et al. 2010).

Method

Participants

The participants ($n = 189$) completed all three time points across 6 months. After excluding participants with missing data at one of the time points, who all completed the SPS at three separate time points because G-Theory analyses do not permit missing data. The participants were a 50/50 split between males and females. The mean age was 37.04 ($SD = 23.47$).

Procedure

Participants were asked whether they wanted to participate in each follow up study following their completion at the initial and second time point. Those who opted-in were then whitelisted and contacted through Prolific to complete the survey across two additional time points (3 months and 6 months) after their initial completion. The survey was hosted on Qualtrics.

Measures

Successful Psychopathy Scale – (SPS: Wallace et al., 2022) is a 54-item self-report measure incorporating six subscales measuring different aspects of successful psychopathy: Callous-Unemotional traits (12 items, e.g., “I don’t care about how others are feeling”), Social Potency (12 items, e.g., “I can often get people to do things they would not do for others”), Confidence (8 items, e.g., “I know and value my own self-worth”), Risk Taking (9 items, e.g., “I will often take risks”), Stress Immunity (8 items, e.g., “When things don’t go my way, I bounce back quickly”), and Manipulation (5 items, e.g., “The potential for social power motivates me to keep going”). The scale yields a total successful psychopathy score with excellent reliability ($\alpha = .90$). Participants state to what extent each item is true for them on a 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

Successful Psychopathy Scale – Short form (SPS-SF: Wallace et al., 2022) is a 30-item version of the full-length 54-item version. Six subscales measuring different aspects of successful psychopathy: Callous-Unemotional traits (5 items, e.g., “I am quite cold hearted”), Social Potency (5 items, e.g., “I am good at keeping conversations flowing”), Confidence (5 items, e.g., “I am skilled at lots of things”), Risk Taking (5 items, e.g., “Dangerous situations excite me”), Stress Immunity (5 items, e.g., “The little things rarely bother me”), and Manipulation (5 items, e.g., “I will do almost anything to get what I want”). The scale yields a total successful psychopathy score ($\alpha = .83$), while use of subscale scores was not warranted for the short scale version due to reliability concerns (Raes et al. 2011). Participants state to what extent each item is true for them on a 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

Data Analyses

Descriptive statistics and checks for normality of the data were completed using IBM SPSS 27 prior to running the main G-Theory analysis, which was conducted using EduG 6.1-e software (Swiss Society for Research in Education Working Group, 2006). This study utilised a repeated measures longitudinal design, with person (P) by item (I) by occasion (O), expressed as $P \times I \times O$. The P and O facets are infinite, and I facet is fixed to the number of items in the SCS and SCS-SF. The object of measurement, or facet of differentiation, to use G-Theory terminology, in this case was persons, which were not considered as a source of error. The facets of generalisation, or sources of variance, were the 64 items of the SPS and the 30 items of the SPS-SF scale, and the three different testing occasions (Bloch & Norman, 2012). The SPS and the SPS-SF data were subjected to G-Study analysis, which distinguished the object of measurement (person) or signal from the other facets potentially producing error or noise (Bloch & Norman, 2012).

G-coefficients were calculated in both relative and absolute terms. The relative G-coefficient (G_r) only accounts for variance directly related to the object of measurement (Brennan, 2001; Cardinet et al., 2010), whereas the absolute G-coefficient (G_a) takes into account all other sources of variance (e.g., item occasion interaction) that may indirectly affect the absolute measurement (Cardinet et al., 2010). G_a is a more cautious measure of reliability that will be emphasised in this study (Bloch & Norman, 2012). In general, a G_a greater than 0.80 suggests that a scale or specific item is reflecting a trait (Arterberry et al., 2014).

Results

The demographic characteristics of total sample and sub-sample of the G-study are presented in Table 7.1. The age range and proportion of males and females were comparable between the full sample and the subsample used for the current study. All 189 participants included in this study completed the SPS on all three occasions across six months. Participants who did not have SPS data on all three occasions were excluded from analyses due to the requirement of complete data for G-Theory application.

Table 7.1.

Demographics of Original Sample and G-Study Sub-Sample

Demographic characteristics	Baseline sample (<i>n</i> = 400)	G-study sample (<i>n</i> = 189)
Age: Mean (SD)	34.03 (12.85)	37.04 (13.48)
Sex		
Male	200	94
Female	200	94
Successful Psychopathy scores: Mean (SD)	156.73 (19.28)	138.27 (23.47)

G-Study

Table 7.2 displays the findings of G analyses. For these analyses both the SPS and SPS-SF was used. The person (P) is a differentiation feature that is handled as independent in the G research. Individual states or dynamic changes at individual levels are shown by the interaction between person and occasion (P O). In contrast, occasion (O) denotes the total impact of the event on all persons (e.g., temporal increase or decrease of successful psychopathy scores). The SPS scale demonstrated reliability of test scores and generalisability of scores across occasions and sample populations ($G_a = 0.78$, $G_r = 0.84$). Moreover, the SPS-SF scale also demonstrated strong reliability of test scores and generalisability of scores across occasions and sample populations ($G_a = 0.78$, $G_r = 0.80$) in measuring stable successful psychopathy.

This means that in the SPS, true differences in successful psychopathy levels across individuals accounted for 84% of the total variance, with 16% of the variance attributed to measurement error. Over half of the error variance (68.6%) was explained by dynamic traits of successful psychopathy and the rest (31.4%) by occasion, which reflected a significant increase in successful psychopathy levels over time. Furthermore, in the case of the SPS-SF, differences accounted for 80% of the variance, whilst the variance associated with measurement error was 20%. Just under half of the error variance (41.8%) was explained by dynamic traits of successful psychopathy, the rest was split between person-item (8.6%), item-occasion (11.3%), and person-item-occasion interaction (38.3%).

Table 7.2.

G-Study Statistics for the Total Sample (N = 189) Including Variance Components for Sources of Error and G-Coefficient for the SPS

Source of Variance	Differentiation Variance	Source of Variance	Relativeerror Variance	%relative	Absolute Error Variance	%absolute
P	0.044		.....		.....	78.0
	.....	I	.....		(0.000)	0.0
	.....	O	.....		0.004	6.90
	.....	PI	(0.000)	0.0	(0.000)	0.0
	.....	PO	0.008	100.0	0.008	15.09
	.....	IO	.....		(0.000)	0.0
	.....	PIO	(0.000)	0.0	(0.000)	0.0
Sum of variances	0.044		0.008	100%	0.012	100%
Standard deviation	0.211		Relative SE: 0.092		Absolute SE: 0.111	
Coef_G relative	0.84					
Coef_G absolute	0.78					
Grand mean for levels used: 2.820						
Variance error of the mean for levels used: 0.004						
Standard error of the grand mean: 0.064						

Note. P=Person effect; I=Item effect; O=Occasion effect; PI = Person-Item interaction, PO = Person-Occasion interaction, IO = Item-Occasion interaction, PIO = Person-Item-Occasion interaction

Table 7.3

G-Study Statistics for the Total Sample (N = 189) Including Variance Components for Sources of Error and G-Coefficient for the SPS-SF

Source of Variance	Differentiation Variance	Source of Variance	Relative Error Variance	%relative	Absolute Error Variance	%absolute
P	0.050		.....		.....	78.0
	.....	I	.....		(0.000)	0.0
	.....	O	.....		(0.000)	0.0
	.....	PI	0.001	9.7	0.001	1.89
	.....	PO	0.006	47.1	0.006	9.19
	.....	IO	.....		0.002	2.48
	.....	PIO	0.005	43.1	0.005	8.42
Sum of variances	0.050		0.013	100%	0.014	100%
Standard deviation	0.224		Relative SE: 0.112		Absolute SE: 0.119	
Coef_G relative	0.80					
Coef_G absolute	0.78					
Grand mean for levels used: 2.868						
Variance error of the mean for levels used: 0.002						
Standard error of the grand mean: 0.044						

Note. P=Person effect; I=Item effect; O=Occasion effect; PI = Person-Item interaction, PO = Person-Occasion interaction, IO = Item-Occasion interaction, PIO = Person-Item-Occasion interaction

Discussion

The purpose of this study was to investigate the temporal reliability of the SPS and SPS-SF, as well as their ability to discern between dynamic and persistent elements of

successful psychopathy utilising G-Theory analyses. Using an adequate sample size from longitudinal dataset collected over 6 months, this study demonstrated that both the SPS and SPS-SF have strong reliability and generalisability of their assessment scores (SPS: $G_a = 0.78$, $G_r = 0.84$; SPS-SF: $G_a = 0.78$, $G_r = 0.80$) across the sample population and occasions in measuring traits of successful psychopathy. This makes it a good tool for exploring successful psychopathy as a dimensional trait psychometric measure using the current measurement design. Therefore, this newly developed measure can be considered a useful tool for exploring successful psychopathy trait levels within general population samples. Moreover, there were no other observable sources of measurement errors that may have impacted SPS scores, suggesting that both the SPS and SPS-SF are reliable trait measures within the current measurement design.

The results of this study have shown that the SPS predominantly measures enduring successful psychopathy, which is in-line with existing research conducted on prototypical psychopathy, which apart from some early 19th century conceptualisations (see Millon et al., 2003 for review) was principally identified as a trait (Crego & Widiger, 2022; Hare & Neumann, 2003; Lykken, 1995; Lynam & Miller, 2015; Viding et al., 2014). Nevertheless, there has been limited examination of psychopathy as a state or a trait, and there were no measures available to assess successful psychopathy, making this study the first of its kind. However, state or trait differentiation was conducted using latent state-trait modelling (e.g., Geiser et al., 2015; Hamaker et al., 2007; Kenny & Zautra, 2001), which is not suitable for examining the overall reliability or generalisability of assessment scores and unique contributions of measurement error which is a unique feature of the G-Theory (Cardinet et al., 2010; Shavelson et al., 1989). Regardless of the lack of in-depth exploration of prototypical psychopathy as a trait or state, these results map onto current conceptualisations as psychopathy as a trait construct and add novel findings regarding the reliability and trait

manifestation of successful psychopathy with overall 80% of the variance in the sample being attributable to true trait differences between individuals.

On a more practical level, G-Theory's capacity to compute multiple estimates with a single study has the added benefit of enhancing research efficiency and minimising participant burden. For example, G-Theory could dependably and precisely discern state and trait features during changes in the data over time. Because conventional test-retest reliability relies on total scores and cannot drill down into the particular source of the error, changes in scores as participants improve over time obfuscate this information. For example, individual item scores can change over time and the total score may stay the same, therefore variability cannot be identified using the total score. Therefore, G-Theory could be impactful in discerning not only successful psychopathy as a trait or state construct but could be back applied to discern differences in prototypical psychopathy measures based on different models of psychopathy.

Using G-Theory to distinguish between state and trait appears simple, since it is the most precise method currently available for estimating the unique contributions of numerous sources to the total variance in a measure (Bloch & Norman, 2012). However, as previously said, it remains underutilised. There could be two reasons why G-Theory approaches aren't frequently used in psychometrics: One alludes to the complexity of existing software solutions, while the other involves arduous data gathering involving three or more time periods, which might be associated with significant attrition rates. A new G-Theory-based method for discriminating between instruments assessing state and trait has the potential to become a new "gold standard" in psychometrics.

Given the limitations of using test-retest and ICC scores to distinguish between state and trait, the G-Theory method can be used to assess the ability of psychometric measures of both prototypical and successful psychopathy to accurately capture a state or a trait and

disaggregate their influences while also taking into account other sources of measurement error. Although CTT approaches were usually effective in the construction of psychometric instruments in the past, the G-Theory method is now required for a more rigorous validation of psychopathy and outcome measures, particularly where state and trait features must be separated.

Limitations and future directions

The present study is not without limitations. For example, analyses only included participants who completed the scale at all three assessment occasions, approximately 47% of the total sample at baseline ($n = 400$), which may have led to selection bias. The study only included the 189 participants who completed all waves.

Moreover, the phenomena of common methods bias (or variation) in research relying on self-reported measures is well-documented. Because various constructs are assessed using similar procedures (e.g., multiple-item scales provided within the same survey), spurious effects occur owing to the measuring instruments rather than the constructs being tested. For example, in the same survey, asking subjects to report their own perceptions or impressions on two or more constructs is likely to produce spurious correlations among the items measuring these constructs due to response styles, social desirability, and priming effects that are independent of the true correlations among the constructs being measured (Podsakoff et al., 2012).

Conclusion

Overall, the findings of this study indicate that the SPS and SPS-SF is a reliable scale for measuring enduring traits of successful psychopathy and can be used to further explore this construct in empirical ways. Moreover, G-Theory could potentially be incorporated into existing measures of prototypical psychopathy as a means of providing more robust

validation and distinguishing between the state and trait features of the construct. Sentence here about taxon removed for clarity.

Chapter 8. Successful Psychopathy and Reward-Based Decision Making: A Pilot Study

Introduction

Thus far throughout this thesis, I have established that some of the most distinguishing elements of psychopathy are a lack of strong emotions, such as fear and threat, which contributes to increased sensation-seeking and risk-taking behaviours (Glimmerveen et al., 2022). Furthermore, individuals with high prototypical psychopathic traits appear to be geared towards instant rewards, often despite prospective punishment (Blair, 2006). Regarding decision-making behaviour overall, research has consistently demonstrated that individuals with high psychopathic traits are more likely to behave unfairly in dictator games (Koenigs et al., 2010), betray their partners in altruism-based dilemma games (Rilling et al., 2007), and have a propensity to give out harsher punishments to maximise their own enjoyment in a task (Masui et al., 2011). The potential mechanisms prompting this *atypically motivated behaviour*, which has been long cited within psychopathy literature (Cleckley, 1941; Craig et al., 2009; Hare & Neumann, 2008) is still under debate, however evidence indicates a neuropsychological influence.

Using tasks that include viewing affective images and learning aversive conditioning, functional magnetic resonance imaging (fMRI) studies have repeatedly revealed brain activation abnormalities in several brain regions in psychopathic individuals, including the orbitofrontal cortex (OFC), amygdala-hippocampus complex, anterior cingulate cortex (ACC), and insula (Birbaumer et al., 2005; Deming & Koenigs, 2020; Gordon et al., 2004; Kiehl et al., 2001; Muller et al., 2003; Poepl et al., 2019). Although they are frequently triggered by the same task, each of these brain regions are responsible for separate aspects of emotional processing. The OFC is engaged in the processing of affective stimuli, whereas the amygdala-hippocampus complex is involved in the appraisal of negative reinforcers

(Kringelback, 2006). Further, the insula is engaged in pain control, whereas the ACC oversees the emotional salience evaluation and emotional response regulation (Bush et al., 2000; Flynn et al., 1999). As a result, risk-taking and decision-making studies on psychopathy concentrate on the ability to renounce potentially big immediate benefits in exchange for tiny longer-term rewards in order to avoid larger losses.

One theoretical framework that aims to integrate affective, information-processing, and motivational components crucial to understanding the relationship between psychopathy and decision-making is the Somatic Marker Hypothesis (SMH; Damasio, 1994). Owing to the lack of focus on cognitive neuroscience within this thesis, the introduction [see Chapter 1] omitted in-depth discussion of this theory when compared to some others, such as the low-fear hypothesis (Lykken, 1995). Therefore, this will be briefly covered within this experimental chapter. According to the SMH, positive and negative socialisation experiences are translated into bioregulatory signals early in life (somatic markers). These signals, once created, implicitly guide behaviour, including decision-making, by modulating responsivity to positive or unpleasant experiences. The paradigm that began as an emotional decision-making theory, proposes that in psychopathy, there is a defect in the formation or utilisation of somatic indicators to guide behaviour which can reduce the ability to make rational decisions (Bechara & Damasio, 2005).

Emotions are at the top of the bioregulatory response system and thus render the occurrence of a behaviour as likely or unlikely, for example feeling scared and inhibiting behaviour. Neurological research suggests that injury to the OFC, the amygdala, and/or connections between them impairs the ability to steer decisions effectively, owing to somatic (or emotional) signals that cannot be processed or are simply ignored (Bechara et al., 1999). Preliminary findings from neuroimaging research suggest that psychopathy is caused by abnormalities in the OFC-amygdaloid networks (Veit et al., 2002). Emotional learning is

established by somatic or physical feelings that consciously or unconsciously record behaviours that have negative or beneficial results for the individual, according to the SMH (Tranel et al., 2000). As a result, adaptive emotional learning is dependent on the induction of balanced punishment- and reward-related reinforcement of certain behavioural choices. Furthermore, in order to maintain survival, decision-making is bio-regulated based on incentive signals of approach or avoidance (van Honk & Schutter, 2006). Individuals with high prototypical psychopathic traits share behavioural and affective characteristics with orbitofrontal patients, such as impulsivity, low empathy, and impaired learning from experience, and further research suggests that these individuals are impaired in recognising their bodily sensations during stressful events (Gao et al., 2012; Nentjes et al., 2013).

The initial research on the SMH was based on data from the Iowa Gambling Task (IGT; Bechara et al., 1994), which can index cognitive processes such as affective deficits, fearlessness, and impulsivity in patients with lesions in the ventromedial (VM) frontal lobes. Such patients make bad (e.g., selecting risk decks consistently) or “atypical” decisions on the IGT and exhibit changes in psychophysical reactivity in reaction to good and negative outcomes. Bechara (2004) characterised this impaired decision-making as an inability to employ somatic signals to influence decisions toward the most positive outcomes. Given the parallels in presentation between VM-damaged patients and those with psychopathy in terms of impulsive and antisocial behaviour, low empathy, and failure to learn from experience, the IGT presents a valuable test of the SMH in individuals with high psychopathic traits (Damasio, 1994). The IGT involves probabilistic learning with (monetary) reward and punishment information. Participants are given four decks of cards, two of which are 'risky decks' with high reward and even greater penalty magnitudes, and two of which are 'non-risky decks' with reduced reward and punishment levels. Choosing the non-risky decks results in the biggest combined total over time.

To date, the IGT has produced conflicting results when exploring the relationship between psychopathic traits and performance. According to the SMH, individuals with high psychopathic traits are more likely to choose risky decks more frequently and fail to become risk-averse during the task (Mitchell et al., 2002). Moreover, when including autonomic measures alongside the IGT, it was demonstrated that there were increased anticipatory electrodermal responses (e.g., heart rate and skin conductance) in controls before selecting cards from the riskier decks when compared to those high in psychopathic traits (Broom, 2012), and these implicit, unconscious indicators assist them to choose advantageously throughout the activity. Furthermore, findings of performance deficits in high psychopathic traits were supported within an independent sample (Beszterczey et al., 2013), which demonstrated that both the PCL-R Factor 1 (associated with affective and interpersonal deficits) and PCL-R Factor 2 (associated with unstable and antisocial lifestyle) were found to positively predict poor performance on the IGT. In contrast, Lösel and Schmucker (2004) discovered no link between psychopathy and IGT performance in a high psychopathic forensic population. This was further supported by Schmitt et al. (1999) who found differences in performance based on levels of anxiety, but no predictive relationship between psychopathy, and Kuin & Masthoff (2016) who had similar null findings. In contrast to prior findings, Hughes et al. (2015) discovered that psychopathy is favourably connected to IGT performance. This study, however, was relatively unusual in that all three groups of participants including “healthy” controls, low-psychopathic individuals, and a forensic group high in psychopathic traits failed to demonstrate learning during the task, although the antisocial factor of psychopathy was associated with better performance.

The reported inconsistencies across these studies could be due to a variety of variables, such as nature of the sample (e.g., clinical or general), each of which may have measured psychopathy differently, or whether real or fake incentives were used indicating

differences in perceived risk (e.g., real money or play money; Yao et al., 2019). However, one factor which could bear the most weight is the conceptualisation of psychopathy as a multidimensional construct (Edens et al., 2006; 2011) and not a taxonic one, with underlying trait-clusters and variation in trait-manifestation. Theoretically, these variants could help explain the disparity in psychopathic traits and performance on tasks related to decision-making and risk-taking. The psychopathic personality as defined by Cooke & Michie (2001) can be conceptualised across affective (deficits in empathy, guilt, and remorse), interpersonal (egocentric, arrogance, and deceitful), and behavioural (irresponsible and impulsive) domains. Furthermore, emerging research supports the existences of psychopathic traits within clusters, which form specific typologies, such as prototypical, criminal, and successful psychopathy, each of which is distinguished by a distinct constellation of psychopathic characteristics, with a dominant phenotypic pattern (e.g., TriPM Boldness, TriPM Meanness) frequently visible (Dutton, 2012; Hall & Benning, 2006; Skeem et al., 2011; Wallace et al., 2022 [see Chapter 4]).

Furthermore, as demonstrated this paradigm has been explored within the psychopathy literature more broadly, however, to date it has not yet been investigated alongside either psychometrically based trait-measures of successful psychopathy nor has it been assessed in historical or contemporary definitions of successful psychopathy. As such, this study will compare high and low scorers on the IGT whereby it is predicted that,

H1: Those scoring high on successful psychopathy will have higher monetary totals on completing the task than low scorers in successful psychopathy

H2: Those scoring high in successful psychopathy will select more advantageous decks than low scorers in successful psychopathy

H3: There will be no significant differences in prototypical psychopathy across the IGT in both deck selection and monetary total

Methods

Participants

A subsample of participants ($n = 37$) from Chapter Five who indicated (via button press) that they would be happy to be contacted about future research were screened for [a] being male, and [b] levels of successful psychopathy via the Successful Psychopathy Scale (SPS; Wallace et al., 2022), with those scoring in the top and bottom 10% sent a link to this study, to ensure distinctions between the two groups, via the crowd-sourcing website Prolific less than 24 hours after completing the SPS. The rationale for the above-mentioned inclusion criteria was due to previous findings that males typically score higher in both prototypical psychopathy and successful psychopathy, making them a suitable sample for the pilot to ensure the high scorers were represented, whilst ensuring a more sex-harmonious sample. The final sample comprised 37 participants, split between high ($n = 21$) scorers ($M_{\text{age}} = 46.47$, $SD = 13.76$) and low ($n = 16$) scorers ($M_{\text{age}} = 39.00$, $SD = 14.20$). The participants were compensated for their time at a rate of £6.00_{ph}.

Measures

Iowa Gambling Assignment (IGT; Bechara et al., 1994). This task (shown in Fig. 1) was the similar to the one employed by Bechara and colleagues and was hosted on Inquisit (Inquisit Software 4.0.5, 2014), which is a general-purpose application for designing and executing psychological studies and measures. The goal of the task is to maximise the profit from a loan made with play money. Participants must make a series of 100-card picks from one of four card decks (A, B, C, and D). Each choice is followed by a reward (monetary gain) or punishment (monetary loss). The schedules for rewards and punishments are predetermined: Decks A and B provide significant immediate profits but involve the possibility of much higher long-term penalties, resulting in a total loss in the long run

(disadvantageous decks). Decks C and D have modest immediate rewards but lower long-term penalties, resulting in long-term gain (advantageous decks).

Figure 8.1.

Depiction of The Iowa Gambling Task (IGT). Across Trials, Decks A and B Produce Large Wins but Even Larger Losses (Thus are Risky and Produce Net Losses), While Decks C and D Produce Small Wins but Even Smaller Losses (Thus Providing Net Gains).



Procedure

The study received ethical approval from a UK institutional Research Ethics Committee during December 2021. Participants took part in the research by opening a link to an online survey hosted by Qualtrics. After reading a participant information sheet, participants were directed to complete a consent form. Next, participants reported demographic information (age and sex) before completing being directed to the experiment hosted on Inquisit. Following completion of the task, participants were automatically redirected back to the Qualtrics portal to re-confirm consent and be debriefed.

In a computerised version of IGT (Bechara et al., 2000), the subject sees four decks of cards labelled A, B, C, and D that are identical in appearance and size and have various schedules of reward and penalty. The participant is told that the game demands a long succession of card selections, one card at a time, from any of the four decks until they complete the task. The goal of the task is to maximise profit as much as possible, and if they are unable to win, to minimise loss as much as possible. They are free to switch from one deck to another whenever and as often they wish, but they are not told how many card picks must be made ahead of time. After 100 card picks, the task is completed. The number of cards selected from the two advantageous decks was summated and the mean for each group was calculated to assess good performance.

Analysis

Independent *t*-tests were conducted to test the hypotheses with respect to IGT performance as measured by advantageous deck selection and final monetary total, and differences between high successful psychopathy and low successful psychopathy. An additional *t*-test was included which looked at whether levels of prototypical psychopathy were different between the groups to further establish conceptual differences between the two manifestations of psychopathy. Cohen's *d* (Cohen, 1988) was reported for effect sizes.

Selecting the Iowa Gambling Task (IGT) for group analysis, focusing on low-risk decks as the dependent variable (DV), and employing a *t*-test rather than a mixed ANOVA with block as a within-subject factor and group as a between-subject factor were motivated by methodological and theoretical considerations. The IGT is a tried-and-true tool for assessing decision-making in the context of risk and reward when it is used in group analysis. This makes it possible to compare performances amongst several groups. A *t*-test, as opposed to a mixed ANOVA, simplifies the research process, particularly in the case of pilot studies,

and reduces complexity and interpretation problems when group differences are the primary focus of the investigation.

The decision to focus on low-risk decks as the DV aligns with the specific field of research that is concerned with risk aversion or group sensitivity. With this narrow focus, it is feasible to look more closely at how those scoring high and those scoring low on successful psychopathy handle circumstances involving decision-making, revealing in particular their propensity for lower risk alternatives. The concentration on low-risk decks allows for better discernment in variations of risk-taking behaviours between subtypes of psychopathy, a subject of contention within psychopathic research (see Dean et al., 2019).

Results

Independent *t*-tests explored the differences between high and low successful psychopathy scorers and their performance on the IOWA Gambling Task (Bechara et al., 2000; see Table 8.1). The 21 high scorers ($M = 54.43$, $SD = 15.21$), relative to the 16 low scorers ($M = 42.44$, $SD = 11.30$), demonstrated higher likelihood on average to select the advantageous decks within the task, $t(35) = -2.64$, $p = .012$. The magnitude of the difference in means was a large effect (Cohen's $d = .89$), indicating better decision making and a propensity for delayed gratification with a focus on long-term success rather than short term. There were no significant differences for their final total, $t(35) = -1.80$, $p = .080$, despite the high scorers attaining higher final totals ($M = 2088.10$, $SD = 904.97$), than the low scorers ($M = 1546.88$, $SD = 904.33$). The magnitude of the difference in means was a medium effect (Cohen's $d = .59$). Further, *t*-tests supported the differentiation between successful psychopathy and prototypical psychopathy, with no significant difference between TriPM total scores within the sample, $t(35) = -.958$, $p = .344$. The magnitude of the difference in means was a small effect (Cohen's $d = .31$), yet significant differences between successful

psychopathy can be observed between the two groups, $t(35) = -8.10, p < .001$, which yielded a small effect (Cohen's $d = .31$). There were no significant differences in age between the two groups, $t(35) = .476, p = .319$, with a small effect (Cohen's $d = .16$).

Table 8.1
Results Comparing High and Low Successful Psychopathy Scores on The IOWA Gambling Task

	High SPS		Low SPS		$t(35)$	p	Cohen's d
	M	SD	M	SD			
IGT Advantage Deck	54.43	15.21	42.44	11.30	-2.64	.012	.89
Final Total	2088.10	904.97	1546.88	904.33	-1.80	.080	.59
Age	38.05	14.61	40.13	10.90	.476	.319	.16
TriPM Total	68.71	13.55	63.87	17.18	-.958	.344	.31
SPS Total	177.90	14.26	137.56	15.93	-8.10	<.001	.27

Discussion

This pilot study sought to examine the impact of high and low levels of successful psychopathy on reward-based decision making within a general population sample.

Participants who scored high on successful psychopathy (total scores) looked to be better decision-makers as a function of IGT scores as a behavioural index. This study shows that performance on the IGT is influenced not just by neurological mechanisms, but also, to some extent, by individual differences in personality traits and cognitive decision-making abilities.

The high and low scoring groups on successful psychopathy had a significant difference in their choice of deck during the task, with the high scoring group choosing safer, less risky decks which yielded smaller rewards over a longer time period. In addition, they also concluded the task with a higher final 'monetary' total than the low scoring group, however this finding was not statistically significant. This indicates that high successful

psychopathy can be adaptive in regard to making calculated decisions, when compared to their low scoring counterparts, lending support to the notion that they may be successful in certain professional environments (e.g., corporate; Boddy, 2006; Howe et al., 2014). Moreover, prototypical psychopathy showed little difference between groups in their performance on the task and the results were not confounded by age.

Reviewing performance on the IGT is fundamentally worthwhile to examine psychopathic traits across its variant subtypes and clusters. In regard to successful psychopathy there is still relatively little known about how it manifests and how behaviour is exhibited in comparison to its prototypical counterpart, such as exhibiting better rational thinking and an ability to focus on long-term goals. However, the results from this study are supported by prior research demonstrating that “successful psychopaths” do not show the structural and functional impairments of the OFC, amygdala, and hippocampus (Raine et al., 2004; Yang et al., 2005), and they are distinguished by intact P3 responses, which are electrophysiological indices of information processing when measured using EEG (Gao & Raine, 2010; Polich, 2007).

Furthermore, according to the SMH (Damasio, 1994), robust autonomic functioning has been reported in “successful psychopaths” (Ishikawa et al., 2001) and interpreted as making them more sensitive to detection cues and better decision makers in general. They are also thought to have somewhat intact fear conditioning, as opposed to the impairments shown in “unsuccessful psychopaths”. Along with these intact somatic indicators, effective psychopaths have improved executive functioning (Ishikawa et al., 2001), which is thought to facilitate their ability to lie, deceive, and manipulate others. It is also suggested that “successful psychopaths” have greater cognitive empathy - the ability to understand another person's point of view without necessarily feeling any amount of emotional empathy (Mullins-Nelson et al., 2012). Taken together, the hypothesis shows that “successful

psychopaths” do not exhibit the same neurological deficits as their prototypical counterparts. However, the knowledge to be gained from these studies is still limited due to its use of the historical definition of successful psychopathy by means of lacking in convictions for crime, or criminal behaviour without incarceration. Although, it does support the indication that there are differences between psychopathy subtypes and these may be down to compensatory characteristics, such as good executive functioning and intact somatic markers, which provide a protective buffer against risk-taking and antisocial behaviour (see Lösel & Bender, 2003). Therefore, the findings from this pilot study using a more operationalised definition of successful psychopathy can be both considered consistent with early research (see Ishikawa et al., 2001; Raine et al., 2004; Yang et al., 2005), and novel.

Lastly, the findings here indicate that psychopathic traits are associated with risk-taking decisions under ambiguity, but this does not demonstrate impulsive decision-making in intertemporal choice. Intertemporal choice refers to the difficulty of deciding between smaller, sooner rewards and greater, later ones (Frederick et al., 2002). People prefer smaller benefits that are available sooner over larger rewards that are available later, discounting future rewards. This is known as temporal or delay discounting (Ainslie, 1975; Frederick et al., 2002). The devaluation of future gains has far-reaching effects for the wealth and health of decision makers as well as society at large (Frederick et al., 2002; Golsteyn et al., 2014; Mischel et al., 1989). Individuals with prototypical psychopathic traits are considered to struggle delaying gratification (Miller & Lynam, 2003; Newman et al., 1992) and prefer large rewards sooner (Choy et al., 2022; Selbom & Drislane, 2021). They typically do not take losses seriously, and as a result these individuals may be prone to risky decision-making behaviour in everyday life, mapping onto faulty somatic markers. However, it is not yet clear whether the successful psychopathy subtype follows this design, although the results from this study suggest they do not. The high scoring successful psychopathy group tended

towards less risky deck choices and chose to build up their reward over time, instead of selecting the risky decks to encourage greater rewards sooner when compared to low scoring groups and prototypical groups. Potentially this could suggest that ambiguous and intertemporal decisions are distinct categories of behaviour which have different applications in decision-making due to the competency of somatic markers and psychopathy subtypes such as prototypical and successful.

Limitations and Future Directions

Though this is an initial exploration of the manifestation of successful psychopathy traits on a behavioural level, this pilot study is limited in several ways. First, the sample is both small ($n = 37$) and comprised entirely of males – a design decision aimed at reducing potential variation brought about by an inability to control for sex due to low experimental power. As future research moves to including sex within this model, differences between high and low successful psychopathy in females is to be expected. In part, this may be due to prototypical measures focusing on overt antisocial behaviour as an indication of high levels (see Wynn et al., 2012) and often citing males as higher scorers. Females high in prototypical psychopathic traits tend to have different manifestations than their male counterparts (Forouzan & Cooke, 2005), which could be the driving factor in such disparity between the two. However, successful psychopathy does not encompass overt antisocial behaviour, therefore the differences in levels in females may be more distinctive.

Second, there was the lack of any impulsivity or attention psychometrics from which to draw more information, and future studies replicating and expanding on these findings would incorporate such measures such as the Dickman Impulsivity Inventory (Dickman, 1990) and the Brief Test of Attention (Schretlen et al., 1996) into the protocol, alongside other behavioural tasks associated with real-world decision making such as the Stop/Go

Signal Task (SGT; Logan et al., 1984) and the Wisconsin Card Sorting Task (WCST; Grant & Berg, 1993).

Third, future studies should emphasise the potential role of attention in psychopathy and decision making by integrating the Somatic Marker Hypothesis (SMH; Damasio, 1994) and the Response Modulation Model (RMM; Newman, 1998). The RMM suggests that individuals with high psychopathic traits have deficits in the autonomic monitoring of peripheral cues, and thus due to this lack of attention (Kosson & Harpur, 1997), they fail to adapt to their environment. Newman and Kosson (1986), for example, discovered that individuals scoring high on psychopathy demonstrated successful avoidance learning, but only when the implications of punishment were obvious (see also, Scerbo et al., 1990). However, this has since been disputed with additional evidence suggesting that prototypical psychopathy is associated with clear deficits in learning in response to reward and punishment despite obvious cues being given (see Baskin-Sommers & Brazil, 2021 for review).

The distinctive difference in findings on the RMM could relate to differences in somatic markers and psychopathy subtypes. Individuals high in successful psychopathic traits may be able to compensate for their potential attentional impairment by keeping important information readily available, a function which would be aided by intact somatic markers. Individuals scoring high in successful psychopathy with appropriate attention power can thus complete tasks effectively by employing cognitive cost-utility considerations. The somewhat inattentive or prototypical individuals, on the other hand, are unable to pursue this "cognitive path," while also lacking an instinctive emotional control mechanism (somatic markers) that would shield them from harmful actions (see van Honk et al., 2002). This maps onto the theoretical models of successful psychopathy, most specifically the Moderated-expression model (Hall & Benning, 2006), the concept of successful psychopathy as an evolutionary

strategy for adaptation (Glenn & Raine, 2009) and the previous findings of this thesis which demonstrated the intact cognitive abilities of individuals scoring high on successful psychopathy. However, it is important to note that to date, successful psychopathy and attention specifically has not been explored empirically.

Conclusion

Taken together, the findings from this study indicate significant differences in decision-making abilities between high and low scorers on successful psychopathy, as evidenced by those high in successful psychopathy selecting more advantageous decks and accumulating a higher monetary reward on completion. As evidence utilising behavioural decision-making measures is far from clear within this field, further research that *x* and *y* is required to unravel the mechanisms underpinning risk behaviour in psychopathy. The functions of affect and attention in particular needs to be clarified, due to their unique role in guiding behaviour. Moreover, within this field, establishing the relationship between successful psychopathic traits and decision-making specifically will provide significant obstacles such as mixed findings, due to the lack of consistency in both research relating to prototypical psychopathy and performance and the consensus of psychopathy as a dimensionality more broadly. Progress in this area may necessitate extensive cooperation and collaboration in order to collect a diverse sample of individuals with variable levels of psychopathic traits, facets, and subtypes.

Chapter 9. Conclusion, Summary, and Future Directions

Introduction

This thesis aimed to [1] explore the theoretical conceptualisation of successful psychopathy, [2] develop a psychometric measure to assess the traits of successful psychopathy within the general population, [3] validate said measure alongside existing psychopathy scales and relevant variables, such as empathy and aggression, and [4] explore the applicability of the scale to real-world decision making via a behavioural paradigm. Whilst care was given to thoroughly discuss the findings at the end of each chapter, this chapter will provide an abridged overview of the findings to consolidate this body of research. Alongside, this chapter will also add further depth as to the applications and implications of this research for the wider field of psychopathy. Lastly, the overall limitations of this thesis will be presented and discussed with application to wider fields of personality, business, and psychometric scale development.

From the perspective of the broader psychopathy literature, the development and validation of the Successful Psychopathy Scale (SPS; Wallace et al., 2022) has several key implications. First, it provides significant improvements as to the current theoretical conceptualisation of successful psychopathy in terms of an operationalised construct which can be empirically tested, which will facilitate further research within the field of successful psychopathy. Second, the results have provided support for the dimensionality of psychopathy, which are consistent with previous research (Sellbom & Drislane, 2021). Specifically, this work indicates that clusters or subtypes are the putative way to conceptualise psychopathy (Skeem et al., 2003), as they have similar core traits, however they can manifest differently due to the presence of adaptive traits and particular external factors. Third, the results demonstrate that psychopathy as a personality construct can be

associated with successful outcomes, albeit when the traits associated with the psychopathic personality are clustered in a particular way. Thus, aspects of this subtype of successful psychopathy could prove beneficial in professional environments or as workshop tools to improve mental well-being within general populations. Finally, this body of research has presented a robust methodology for scale development incorporating both Rasch analysis and G-Theory tools, which were not utilised in the development of other psychopathy measures, indicating both a unique contribution to knowledge and an important framework to undertake in the future to further determine stable and enduring characteristics associated with psychopathy. This body of research presents a novel contribution to the field of psychopathy and its far-reaching theoretical and empirical applications are discussed below.

Theoretical Contributions

Theoretical findings are discussed within their respective chapters: “Chapter Three: A Systematic Review on the Current Conceptualisations of Successful Psychopathy”, and “Chapter Four: The Development and Initial Validation of the Successful Psychopathy Scale”. This section draws together the key theoretical findings and discusses [1] their relevance to answering the primary research questions, and [2] how these theoretical understandings will shape the empirical studies.

Research Question One

What are the current conceptualisations of successful psychopathy?

Successful psychopathy refers to an individual who possesses the core components of psychopathy (see Crego & Widiger, 2022), while also being able to integrate into society with intact or superior (successful) functioning (Lilienfeld, 2015). Such individuals are thought to be able to gain status and resources with little effort (Babiak & Hare, 2006), and they may exhibit adaptive characteristics such as resilience (Watts et al., 2017), intact

executive functioning (Lantrip et al., 2016), and a dominant interpersonal style that allows for the establishment of superficial rapport (Hare, 1999). Thus, successful psychopathic traits include superficial charm, callous-unemotional affect, duplicitous interpersonal tactics, and reduced shame, guilt, and remorse (Cale & Lilienfeld, 2002; Lilienfeld & Windows, 2005; McCord & McCord, 1964), as well as a lack of empathic concern or the presence of dark empathic traits, which may indicate maintained levels of emotional intelligence (Davis & Nichols, 2016; Heym et al., 2021). Moreover, these individuals are likely to demonstrate a unique constellation of traits when compared to their prototypical counterpart encompassing protective or adaptive characteristics such as stress immunity, social potency, functional impulsivity, self-regulation, and sound cognitive functioning (see Chapter 3). The theoretical findings presented within this thesis demonstrate a need to synthesise the previously theorised models of successful psychopathy, initially conceived by Hall and Benning (2005) in order to develop an understanding of successful psychopathy which can be empirically tested.

Models of Successful Psychopathy (Hall & Benning, 2005; Lilienfeld & Watts, 2015)

According to the Differential-severity model, successful psychopathy is a mild form of prototypical psychopathy (i.e., a "subclinical" variant). In other words, while the core personality characteristics of successful psychopathy are qualitatively the same as those of prototypical psychopathy, individuals scoring high in successful psychopathy have lower prototypical psychopathy scores. Despite the fact that this model acknowledges that psychopathy has numerous aspects or traits, they are expected to covary (i.e., "successful psychopaths" score lower on all facets of psychopathic personality), implying that psychopathy should be viewed as a unitary construct (Lilienfeld et al., 2015).

Whilst the findings of this thesis refute the idea that psychopathy is a unitary construct by incorporating trait measures with sub-facets, the exploration of the theoretical conceptualisation of the literature does offer some support for this model of successful

psychopathy There appears to be agreement in the literature on the lack of criminality and overt antisocial behaviour as foundations for the construct. According to Skeem & Cooke (2010), violence and antisocial behaviour are given greater emphasis within the psychopathy construct in general than past conceptualisations suggested. There is a notable lack of emphasis on the affective components of psychopathy, such as the positive adjustment traits indicated by Cleckley (1941). Whilst Differential-severity (DS) was not highlighted within the systematic review (Chapter 3), it should not be ruled out as a potential model of successful psychopathy, as the absence or reduction of antisocial or criminal behaviour was implicated in the selected studies within the review. It could be suggested that moderate levels of psychopathic traits could enable an individual to become more successful, but extremely high levels could be detrimental to successful outcomes. Furthermore, despite the fact that the misuse of correlates versus traits is still a key issue in the larger psychopathy research (see Cooke et al., 2007), it does not appear to have been imposed onto its subtype of successful psychopathy, as previous theoretical conceptualisations (e.g., Lilienfeld et al., 2015), and the findings within the systematic review (Chapter 3), each demonstrate an absence of overt antisocial behaviour as a defining feature of successful psychopathy.

According to the Differential-configuration paradigm, successful psychopathy is distinguished by a different constellation of (psychopathic) features than its less successful counterpart. As previously noted, (see Chapter 1), most psychopathy researchers agree that psychopathy is a composite of interpersonal, affective, and behavioural characteristics (e.g., Hall & Benning, 2006, Hare, 1991, LeBreton et al., 2006, Lilienfeld & Windows, 2005). What distinguishes this model from the other two is that the different sub-dimensions are not always assumed to covary, allowing individuals to score high on certain psychopathy dimensions while scoring low on others.

These Differential trait patterns have been evidenced within the theoretical component of this thesis (see Chapters 1 & 3) and there appears to be several personality traits or interpersonal actions which are consistently cited as part of the successful psychopathy construct. Initially, and perhaps most prominently is the presence of fearless dominance. Fearless dominance encompasses stress-immunity, social potency, and fearlessness, and as per the findings of the systematic review in chapter three, it is positively associated with reduced stress and adaptive coping styles (Dalkner et al., 2018), professional satisfaction and material success (Eisenbarth et al., 2018; Howe et al., 2014), higher income (Lilienfeld et al., 2014), and leadership (Lilienfeld and Windows, 2005). However, the included studies within the review did not assess each component of fearless dominance separately and instead classified them as one construct. This indicates that there could be the need to tease these components apart to explore which aspect or aspects of fearless dominance are associated with previous and future successful outcomes. Furthermore, two studies within the review highlighted that the presence of antisocial behaviour was associated with increased stress and anxiety in individuals scoring high on prototypical psychopathy, this suggests support for the Differential-configuration model whereby psychopathic traits are not expected to covary, meaning an individual could score high on certain traits but not others in order to better adapt to particular environments.

Finally, the Moderated-expression model utilises conceptual moderators to clarify the concept of successful psychopathy (e.g., Costello et al., 2018; Schütte et al., 2018; Steinert et al., 2017; Wall et al., 2013). Individuals that rank high on successful psychopathy have similar psychopathic traits to their prototypical counterparts, but the utilisation of moderators or buffers determines whether psychopathy has adverse effects or not (Lilienfeld et al., 2015). These moderators can function as either protective variables against poor outcomes (such as criminality) or as amplifiers of favourable results (e.g., performance). The protective factors

highlighted within the review were stable socioeconomic status and intact cognitive functioning. Previous literature has identified low or unstable SES as a potential moderator of antisocial or criminal behaviour in prototypical psychopathy (e.g., Bergstrøm & Farrington, 2021; Walsh & Kosson, 2007). Furthermore, stable SES has found to be predictive of better academic performance (Stenze, 2007) and career exploration and goal attainment (Hu et al., 2020), indicating that stable SES could help explain some of the variance in outcomes for individuals on the psychopathy spectrum. Moreover, good cognitive functioning has been shown to influence response inhibition, reasoning, planning, and problem-solving (Ishikawa et al., 2001; Ross et al., 2007; Widom, 1977). The four studies which discussed the applicability of stable SES and cognitive functioning to the successful psychopathy construct highlighted that these protective factors were only positively associated with the affective and interpersonal aspects of the psychopathy construct, those which are expected to be prominent in the successful psychopathy concept as per the Differential-configuration model.

Overall, the theoretical findings within this thesis highlight the applicability of the theoretical models of successful psychopathy which could be incorporated to develop and operationalise an empirically testable psychometric measure which in turn helped to scaffold Chapter six investigating the predictors of and predictive value of successful psychopathy (e.g., whether stable socioeconomic status predicted successful psychopathy and vice-versa).

Empirical Contributions

Empirical findings are discussed within their respective chapters: “Chapter Four: The Development and Initial Validation of the Successful Psychopathy Scale”, “Chapter Five: Exploration of Convergent Validity in the Successful Psychopathy Scale”, “Chapter Six: Exploration of Predictive Validity using the Successful Psychopathy Scale”, “Chapter Seven: Analysing Stable and Dynamic Aspects of the Successful Psychopathy Scale using Generalisability Theory”, and “Chapter Eight: Successful Psychopathy and Reward-based

Decision-making – A Pilot Study”. This section brings together the key empirical findings and discusses [1] their relevance to answering the main research questions within this thesis, and [2] the psychometric properties of a successful psychopathy measure and its associated implications.

Research Question Two

Can theoretical contributions be operationalised to develop a sound psychometric measure of successful psychopathy?

In recent years there have been a number of significant developments in the field of psychopathy. One has been a renewed appreciation for the distinction in the study of psychopathy between theoretical notions and manifest operationalisations (i.e., models vs. measurements e.g., Hare & Neumann, 2008, 2010; Skeem & Cooke, 2010a, 2010b; Skeem et al., 2011). This has resulted in a greater openness to, and recognition of, alternative approaches to assessing psychopathy for specific purposes (e.g., studying younger vs. older participants, or individuals from the general community, as opposed to offenders; and investigating distinct variants of psychopathy, such as "successful" types).

A significant advancement in the study of psychopathology in general (e.g., Kotov et al., 2017) has been a shift toward viewing psychopathy as a continuous or dimensional condition rather than a discrete or "taxonic" disorder—and toward the use of terms such as "high-psychopathic offenders" or "individuals high in psychopathic traits" rather than "psychopaths." This advancement is significant because it has led researchers to study psychopathic traits in general clinical and community samples, as well as in correctional and forensic inpatient settings, as psychopathy is no longer considered a discrete class amongst the majority of researchers.

Another advancement in the discipline is the study of psychopathy in terms of symptom subdimensions (or facets) rather than total psychopathy scores. This shift in emphasis reflects mounting evidence that various symptom facets of psychopathy have contrasting relationships with various criterion measures ranging from reported anxiousness to cognitive-task performance to affective-physiological reactivity, and that distinguishable variants ("subtypes") of psychopathy exist, reflecting different configurations of underlying traits. The theoretical findings of this thesis very much support the existence of psychopathy variants or subtypes, specifically successful psychopathy. Based on the findings within Chapter three, a pattern of trait manifestation seemed to emerge indicating what the construct of successful psychopathy would encompass, thus these findings were utilised to develop an item pool to be tested psychometrically.

The initial item pool consisted of 175 items across a wide span of adaptive personality attributes thought to be associated with psychopathy in a broader sense and successful psychopathy more specifically; these included conscientiousness, risk-taking, confidence, pride, social potency, fearlessness, leadership, functional impulsivity, decision-making, stress immunity, drive, ambition, callous-unemotional traits, self-regulation, optimism, ambition, perspective taking, perseverance, locus of control, persuasiveness, conformity, perseverance, resilience, as well as the Five Factor Model of Personality (Costa & McCrae, 1985) encompassing agreeableness, conscientiousness, extraversion, neuroticism, and openness to experience. These 175 items were then piloted in a small sample and a sub-set of these items were submitted to experts within in field of psychopathy to be rated (-1, 0, +1) on how well they believed them to represent successful psychopathy.

The initial findings from this pilot study demonstrated viability for the construct of successful psychopathy with the pilot scale being a 51-item scale consisting of 5-components, namely (i) risk taking encompassing impulsivity and decision-making, (ii) self-regulation

encompassing self-belief, willpower, and achievement striving, (iii) social potency encompassing social adeptness and the ability to charm others and create bonds, (iv) stress immunity encompassing an individual's level of resilience and lack of internalisation, and (v) CU traits encompassing what are often considered the core traits of psychopathy (e.g., callousness, low empathy, shallow affect). The SPS was positively associated with all components of the TriPM (Boldness, Meanness, and Disinhibition) demonstrating concurrent validity, as well as being positively associated with the Political Skills Inventory and Work Role Performance, supporting the predictive validity of the scale when applied to outcomes of professional success (see Research Question 3 for further discussion). The pilot study was useful for identifying the initial items appropriate for a psychometric scale of this nature, and to test whether the scale would perform as expected in a general population sample.

The most robust component identified within the SPS pilot study appeared to be risk taking, which is consistent with the research literature suggesting that the ability to take calculated risks is a key feature of successful psychopathy (e.g., Lilienfeld et al., 2012; Palman et al., 2020; Poythress & Hall, 2011). The Pearson's correlations and EFA indicated that the SPS may tap into the positive-adjustment traits associated with psychopathy, such as social potency (Cleckley, 1941/1976) and fearless dominance (Lilienfeld, 2005), which are prime features of the successful psychopathy construct as they enable the individual to form superficial relationships with others in order to get what they want, and additionally they are useful skills within professional environments to a certain extent (e.g., Babiak et al., 2006). Additionally, it supported the importance of affective psychopathic traits to the construct of successful psychopathy (Crego & Widiger, 2022). Furthermore, the SPS had high internal consistency and demonstrated construct validity. The SPS was also most strongly correlated with the TriPM Total, Boldness and Meanness subscales, demonstrating good concurrent validity. This is supported by similar findings in research on psychopathy and success (e.g.,

Pasion et al., 2016; Persson & Lilienfeld, 2019), which suggests that boldness or social potency is a key component of successful psychopathy.

Nevertheless, following the responses from the expert raters, a need for further item development to cover additionally highlighted aspects was identified. For example, expert raters suggested the scale needed to demonstrate fewer conscientiousness and neuroticism related items and more items based on motivation and drive. Moreover, the CU traits subscale, whilst psychometrically sound ($\alpha = .63$), did not fully demonstrate the depth and core of psychopathy as I considered 5-items too few for such an important facet and core component of psychopathy (Crego & Widiger, 2022; Dinic et al., 2021). Therefore, the scale underwent further item pool generation using the previously applied strategies, and an additional 100 items were conceptualised, based on more recent developments within the literature which became prevalent after the pilot study, as well as suggestions from the expert raters. Ultimately, after further theoretical development and testing, the scale was determined to be a 54-item measure, consisting of 6 facets.

The findings from study two (see Chapter 4), indicated excellent viability for the finalised 54-item SPS and 30-item SPS-SF. The SPS consists of 6 facets, namely core psychopathic traits, social potency, confidence, risk taking, stress immunity, and manipulation, each demonstrating good reliability and meeting the expectations of the Rasch measurement. The full 54-item scale was positively associated with two-components of the TriPM (Boldness and Meanness) as expected and the scale demonstrated positive associations with professional success as measured by the Political Skills Inventory (PSI; Ferris et al., 2005), an overall expectancy for success (GESS; Corcoran & Fisher, 2000; Fibel & Hale, 1978), and as suggested by previous literature (Boddy, 2006; Glen et al., 2017; Kries & Cooke, 2011), specifically, positive associations with seeking status and wealth.

The SPS demonstrates excellent reliability, internal consistency, and strict unidimensionality for measuring successful psychopathy within general population samples. The finalised measures (54-item and 30-item scales, respectively) met expectations of the Rasch measurement model which allowed for the production of conversion tables which can be employed to increase assessment accuracy by converting individual scores into interval-level data suitable for parametric tests which increases measurement precision. The measure showed no invariance across all demographic groups, with no significant Differential-item functioning (DIF). The 54-item scale demonstrated good concurrent and predictive validity across an existing psychopathy measure, measures of professional success, success expectancy and motivation.

Overall, the most psychometrically robust component of the SPS were the core psychopathic traits (Crego & Widiger, 2022; Dinic et al., 2021), consisting of affective and interpersonal traits. Indeed, successful psychopathy should be characterised by these core traits associated with prototypical psychopathy, such as callousness, lack of empathy, and superficial charm, alongside moderating variables that create a “subtype” of individual with psychopathic traits (Lilienfeld et al., 2015). This viewpoint is also supported by existing theoretical models of successful psychopathy (Hall & Benning, 2006; Lilienfeld et al., 2015) and provides empirical data to validate findings of a recent systematic review (Wallace et al., 2022), which posited that the models in conjunction with one another presented the best argument for successful psychopathy. Thus, the Differential-configuration and Moderated-expression models demonstrate the importance of the overall construct including additional traits that buffer the core traits and prevent maladaptive behavioural outcomes. This also highlights the importance of identifying moderating factors, which can be structural, environmental, and contextual (Steinert et al., 2017).

Research Question Three

How would this measure perform under validation studies?

The evaluation of the relationship between the knowledge we desire (the nature of the concept) and the knowledge we have (the measured trait or behaviour) and the decisions about whether or not this relationship justifies the use of a measure is referred to as validity. Currently, the discourse on issues around measurement and validity in psychology is still growing. Much needed attention has been drawn to ‘questionable measurement practices’ and risks to the internal, external, statistical, and construct validity of new scales (Flake & Fried, 2019), therefore it is vital to apply vigorous validation practices to newly developed scales to ensure they are fit for purpose.

As shown in Chapter five, the relationships between each of the current prototypical psychopathy scales and the SPS in study two were largely consistent with the predictions. Firstly, the majority of the psychopathy scales (TriPM; Patrick, 2009; (SRP–III; Paulhus et al., 2016; LSRP; Levenson et al., 1995) were positively associated to one another, supporting the premise that there is some consistency across psychopathic personality assessments, albeit adhering to differing interpretations of the construct (see Tsang et al., 2018 for a review).

According to the findings of study two (see Chapter 5), the initial validation study offered preliminary but promising support for the SPS's construct validity and implies that successful psychopathy is both a theoretical and empirical construct that can be tested in general population samples. The SPS revealed good convergent validity with current self-report measures of psychopathy, and as expected, had larger connections with primary or Factor 1 items. The strong and moderate associations between constructs such as boldness, fearlessness, leadership, interpersonal manipulation, and callous affect in the overall sample support the existing theoretical construct of what successful psychopathy entails (Lilienfeld et

al., 2015; Persson et al., 2019; Smith et al., 2014; Wallace et al., 2022) and demonstrate the SPS's ability to begin to capture this.

Moreover, the SPS demonstrated moderate to strong associations with each DAPTQ factor, with the exception of creativity and good management. Because the DAPTQ is thought to be a measure of adaptive qualities that are frequently connected with the psychopathy concept (see Chapter 2), the strong relationships between this measure and the SPS suggest good convergent validity. The SPS's moderate to weak associations with measures of secondary psychopathy or disinhibition suggest that the SPS has substantial variance that is not shared with overt antisocial, risky, or criminal behaviour, supporting its argument for divergent validity. These findings and outcomes are compatible with earlier studies in the field's theoretical judgements of what successful psychopathy would encompass as a psychopathy subtype (Benning et al., 2018; Du & Templar, 2022; Lilienfeld et al., 2015; Steinert et al., 2017; Wallace et al., 2022).

Furthermore, study two presented a preliminary understanding of how the SPS would perform in predicting successful life behaviours such as political skill and professional performance. Political skill is a social competency that benefits not only the individual but also the organisation of which they are a part (Ferris et al., 2007). Adaptive performance is defined as an individual's ability to respond to expected or unexpected changes in task, situation, or environment by changing their behaviour (Pulakos et al., 2000). As a result, past research has shown that people who are calm and collected, challenge-oriented, reward-seeking, and exploratory are more likely to participate in adaptive performance behaviours (Huang et al., 2014; Pulakos et al., 2002).

Individuals with strong prototypical psychopathic traits are typically calm under pressure, charismatic, and reward driven (Paulhus & Williams, 2002), traits that are also represented in its successful subtype (see Chapters 1 & 4). Individuals with high levels of

successful psychopathic traits demonstrated excellent political skill across the domains of social astuteness, interpersonal influence, and networking ability, as measured by the Political Skills Inventory (PSI; Ferris et al., 2007), and they also reported the ability to perform well at work in team and organisational domains, which could be a result of their associated political skills.

Political competence has previously been associated with self-efficacy, scenario assessment, reputation management, and leadership capacity (Munyon et al., 2015). Furthermore, it has been shown to predict good management performance (Semadar et al., 2006), job performance (Blickle et al., 2011), and reduced strain under pressure or stress (Perrewé et al., 2004). Political skill has also been mentioned as important in assisting individuals in packaging and presenting their intentions in order to get along and thrive in organisational contexts (Schütte et al., 2015). As such, individuals scoring high in successful psychopathic traits in possession of good political skill may be more capable at presenting their goal-driven behaviour in a manner which does not give rise to friction amongst co-workers and indicate adaptive performance to higher management (Wihler et al., 2016), allowing for both promotion and the achievement of executive success (Babiak & Hare, 2006).

Study three also explored the relationships between successful psychopathy and both success expectancy and success-seeking. The findings indicate that successful psychopathy, as measured by the SPS, has significant positive relationships with general success expectancy. Furthermore, multiple regressions demonstrated that the relationship between SPS and GESS can be characterised by reduced CU traits, and higher levels of both social potency and confidence offering support for the Differential severity and Differential configuration models (Hall & Benning, 2006; Lilienfeld et al., 2014). Furthermore, the results indicate a strong desire to seek out wealth and status.

Generalised expectancy for success (GESS; Fibel & Hale, 1978) is the degree to which one expects attaining valued outcomes and/or goals. Previous research has indicated positive associations between the GESS and successful coping behaviours, social desirability, and self-efficacy (Fibel & Hale, 1978; Hedidari et al., 2021; Smith et al., 1989), moreover it is negatively correlated with depression, anxiety, and feelings of hopelessness. Expectancies are thought to be a somewhat stable personality domain across situations and are thus considered to be a consistent influence on professional outcomes in organisational environments due to the ability of expectations to influence actions (Scheier & Carver, 1992). An individual with a higher expectancy of success may have better potential outcomes than an individual with a low success expectancy (Racicot et al., 1991) and success expectancy has been considered to directly influence performance outcomes in academic environments (see Midkiff et al., 1986). The findings within this thesis indicate that individuals scoring high on successful psychopathy had a greater expectancy of success, which could allow them to outperform others in certain contexts depending on their motivations to succeed. The results of study 3 indicate that high successful psychopathic traits are associated with a desire to seek wealth and status, as measured by the Life Success Measures Scale (LSMS; Parker & Chusmir, 1992) which is consistent with previous literature conducted on prototypical psychopathy (Glenn et al., 2017; Persson & Lilienfeld, 2019). Therefore, it is conceivable that they may be better suited to professional environments in which they can progress to senior management positions and earn monetary rewards, which they theoretically should be better equipped to do than those with lower success expectancies.

Within Chapter six, the predictive validity of the SPS was examined and tested against relevant real-world traits and outcome behaviours which have been shown to have consistent relationships with psychopathy, such as higher aggression (Verona et al., 2022), reduced empathy (Burghart & Mier, 2022), and more negative childhood experiences

(Moreira et al., 2021), as well as variables which may have been overlooked such as anxiety and attachment in relationships and cognitive skill. This chapter explored both psychological predictors of successful psychopathy, and relevant outcomes that successful psychopathy may predict. Associations were determined between successful psychopathy and childhood experience, aggression, empathy, relationship experience, and cognitive skill. Critically, these relationships were generally positive and fit within the wider literature, in that those who scored high on successful psychopathy tended to have fewer adverse childhood and relationship experiences, cognitive empathy, demonstrated proactive but not reactive aggression, and had sound cognitive skill. It is also of interest that those scoring higher on prototypical psychopathy experienced more adverse relationships, both in childhood and adulthood, displayed high levels of reactive aggression, and had reduced empathy across both facets. Overall, these results suggest there are existing psychopathy subtypes which are built around the same core components, however by demonstrating a more muted manifestation, buffered by adaptive traits and certain external factors, the outcome behaviours between these individuals can vary widely. One such outcome behaviour which is significantly important to the successful psychopathy construct is aggression. Higher levels of aggression are associated with unemployment (Kokko & Pulkkinen, 2000), antisocial behaviours (Coie & Dodge, 1998), and crime recidivism (Baños et al., 2019). However, aggression has also been suggested as having adaptive benefits in general populations (Heilbron et al., 2008), such as rank attainment (Hawley & Vaughn, 2003), mating success (see Volk et al., 2012), and threat perception (Buss & Shackelford, 1997).

Although a variety of outcomes have been studied in relation to reactive and proactive aggressiveness, research on the relationship between psychopathic traits and these two types of aggression is limited. These findings substantiated previous research (Porter et al., 2003; Woodworth & Porter, 2002) that psychopathy was primarily associated with proactive

aggression rather than reactive aggression. However, there were some conflicting results presented, whereby prototypical psychopathy was related to both proactive and reactive aggression whereas successful psychopathy only had significant positive relationships with proactive aggression. There has been a wealth of evidence indicating that individuals who engage in reactive affective-driven aggression are distinctly different than those who engage in proactive goal-directed aggression (Raine et al., 1998; Walters, 2008). Reactive aggression is often associated with spontaneous impulsive responses alongside minimal cognitive processing (Chase et al., 2001), whereas proactive aggression requires forethought, planning, and the pursuit of a goal (Blair, 2003). Thus, it is justifiable that individuals scoring high on successful psychopathy would lean more towards the latter form of aggression, they prioritise their goals and are able to delay gratification (see Chapter 8), they demonstrate intact cognitive skills (see Chapters 6 and 8), and are expected to demonstrate good social competence (see Chapter 1). Although proactive aggression is often associated with antisocial behaviour (Miller & Lynam, 2006), there are several benefits to this particular type of aggression in certain contexts. For example, individuals who demonstrate high proactive aggression have been found to be rated as better leaders (Dodge & Coie, 1987), be more resilient and have a reduced risk of developing severe mental health disorders following traumatic experiences (Hecker et al., 2013; Köbach et al., 2014), and stable self-regulation when compared to reactively aggressive individuals (DeWall et al., 2011; Rathert et al., 2011).

Moreover, individuals with a high proactive aggression have a high approval motive and could be competent at moderating cognitive conflict between benefit and morality, integrating relevant information to goal pursuit, and using information to steer activities in accordance with motivational goals (Spielberg et al., 2011). Furthermore, the findings of study three which demonstrated intact cognitive skills in individuals scoring high in

successful psychopathy, evidencing stable executive functioning, as indexed by a self-report measure of cognitive abilities, would map onto the indication that individuals high in successful psychopathy were able to use cognitive skills, such as emotion regulation, maintenance of appropriate social behaviour, and better decision-making abilities to counteract any of the potential maladaptive outcomes associated with aggressive traits. Furthermore, results demonstrating good cognitive empathy in individuals scoring high in successful psychopathy could also ameliorate outcomes associated with proactively aggressive individuals.

The above findings have potential applicability across various domains, most prominently professional and emotional well-being. Typically, within certain high pressure work environments, such as finance or medical sectors, being resilient to the pressures and high stress situations one may experience would be highly beneficial (e.g., Murden et al., 2018). For example, research conducted by Johnson et al. (2005) indicated that individuals in higher positions such as supervisors or directors were less prone to stress and burnout, which could be explained by higher levels of emotional resilience and an ability to moderate any internal conflict via a focus on the end goal. Moreover, both intact executive functioning and cognitive empathy have been associated with better well-being (Shanafelt et al., 2005; Short et al., 2016) and workplace performance (Chan et al., 2021; Rockstuhl et al., 2011), both of which have significant positive relationships with the successful psychopathy construct as evidenced within Chapter six of this thesis. Therefore, successful psychopathy could be leveraged into training exercises with a focus on building resilience, avoiding burnout, and managing and balancing emotional strain with cognitive conflict resolution techniques. Chapter seven explored the longitudinal findings of the SPS across three separate time points to establish test-retest reliability and generalisability using generalisability theory (G-Theory). The findings demonstrated that the SPS and SPS-SF had strong test-retest reliability,

no discernible measurement errors, and generalisability of their assessment scores, across the sample population and occasions. The analyses were able to discern between both the enduring and dynamic aspects of the construct and indicated that the SPS is a dimensional trait measure which can be utilised for examining trait levels of successful psychopathy within the general population. The utilisation of instruments that clearly measure enduring and dynamic aspects of a construct are beneficial to assessing and monitoring personality traits across the lifespan. The SPS can be identified as a reliable tool for research, and an initial starting point from which to target dynamic aspects of the wider psychopathy construct that may be amenable to change or improvement (e.g., maladaptive traits) and the dynamic aspects of successful psychopathy that could be adapted into interventions or workshops which look to enhance successful behaviours (e.g., positive adjustment traits). In sum, the SPS has demonstrated excellent reliability and generalisability after undergoing robust psychometric testing via Rasch analysis and generalisability study, methods which were not employed in previous psychopathy scale development, indicating its statistical rigour.

Overall, my findings were broadly consistent with the hypotheses and supportive of the validity and reliability of the scale. Firstly, the SPS had good convergent validity with existing measures of prototypical psychopathy. Secondly, the findings supported the predictive validity of the scale in regard to relevant traits and outcome behaviours. Thirdly, the scale indicated good psychometric qualities in terms of reliability and generalisability indicating the SPS as a good tool for research into the field of successful psychopathy. Finally, to date, no existing measure of psychopathy has undergone scrutiny by Rasch analysis and G-Theory aside from the SPS, representing a unique contribution to knowledge.

Research Question Four

Does the psychometric scale have applications to real-world decision-making?

Individuals high in prototypical psychopathic traits typically exhibit shortcomings in the Iowa Gambling Task (IGT; Bechara et al., 1994), however the behavioural pilot findings within this thesis indicate this may not be as black and white as suggested. Study 4 demonstrated initial data suggesting that individuals who scored highly on the SPS appeared to perform well on the task and did not appear to have detrimental decision-making like their prototypical counterparts (e.g., van Honk et al., 2002).

According to the findings of this study, performance on the IGT is influenced not only by neurological mechanisms, but also, to some extent, by individual differences in personality traits and cognitive decision-making ability. The high and low scoring groups on successful psychopathy chose different decks during the assignment, with the high scoring group choosing safer, less risky decks that offered lesser prizes over a longer time span. Furthermore, they completed the assignment with a greater final 'monetary' total than the low scoring group, however this result was not statistically significant. When compared to their low scoring counterparts, high successful psychopathy can be adaptive in terms of making calculated decisions, adding weight to the notion that they may be successful in specific professional situations (e.g., corporate; Boddy, 2006; Howe et al., 2014).

This is consistent with previous literature indicating that "successful psychopaths" are good negotiators (Jonason et al., 2012) as well as being effective leaders and managers (Babiak & Hare, 2006; Boddy et al., 2010; Furnham, 2007). Moreover, previous research has indicated that individuals scoring high on prototypical psychopathy tend to be more rational thinkers and decision makers, therefore they will typically choose the most rational solution to a problem (Osumi & Ohira, 2010). This could further be explained by Rational Choice Theory (RCT; Zey, 1992), which summarises a common set of assumptions of how and why people make certain choices. Within the psychopathy literature there is a wide consensus that these individuals tend to be self-centred risk-takers with little regard for others (Horley, 2014;

Lyons, 2019; Perez, 2012; Poythress & Skeem, 2011), which maps onto RTC on the assumption that individuals will seek to maximise utility in corporate situations via assessing pathways to overall net gain (Hogarth & Reder, 1986). Moreover, this choice does not have to have a socially justified reason, and is typically classed a dispassionate calculation, which is very much in keeping with the interpersonal style of individuals within the psychopathic personality domain. Ultimately, this would suggest that individuals high in prototypical psychopathic traits could be beneficial within these professional environments, however this may only be short-term due to their inability to delay gratification (Pasion et al., 2018), however as demonstrated by the findings of this study, this is not an issue that is present in the subtype of successful psychopathy. In comparison to their prototypical counterparts, those scoring high on successful psychopathy did not exhibit risky behaviour or reward hypersensitivity, indicating they may not experience the same neurological deficits (see Raine et al., 2004; Yang et al., 2005), such as structural or functional impairment of the OFC, amygdala, and the hippocampus.

The findings from Chapter eight's behavioural task have potential application to professional environments, specifically within the realm of leadership training. Typically, leadership is discussed in terms of emergence and effectiveness, with individuals with high prototypical psychopathic traits typically emerging as leaders within organisations (Babiak & Hare, 2006; Pearlman, 2016), however they are often cited as being less effective within this leadership role (Boddy, 2014; Mathieu & Babiak, 2016) and overall negative leadership outcomes are likely (Landay et al., 2019). However, as the findings of this thesis demonstrate that individuals with high successful psychopathic traits are less reactively aggressive and more empathetic (see Chapter 6), as well as being better decision-makers and less drawn to immediate gratification (see Chapter 8), this subtype could prove beneficial in not only finding emerging leaders but maintaining effective ones via utilising the SPS as a workshop

tool to enhance vital skills within a workforce such as resilience, confidence, and social skills for managing others.

Limitations And Recommendations for Future Research

Although specific study-by-study limitations have been discussed throughout this thesis, it is important to consider the empirical results in light of wider limitations and future avenues of research. This section discusses ‘sample-’ and ‘psychometric-based’ limitations. Moreover, general future directions as a result of these findings will be presented.

Sample

Homogeneity

First, while findings of this thesis were replicated across three independent samples, all samples were derived from the UK. Although this research is contextualised within wider literature developments pertaining to the construct of psychopathy, it is important to acknowledge variations in values, social norms, and definitions, therefore it would be beneficial to replicate these findings within international samples. Findings indicate that psychopathic traits have generally good stability and distribution across cross-cultural studies (e.g., Cooke et al., 2005), however previous studies have typically used the factorial approach and the PCL-R adopting a taxonic view of psychopathy. Therefore, it is challenging to assess how a trait-based psychopathy subtype measure such as successful psychopathy would perform cross-culturally, although the SPS has demonstrated excellent generalisability within the current samples within this thesis, indicating its potential to be applied to other populations. It is expected that the SPS will perform similarly in European and US samples, particularly as the scale allows for the individualisation of success and motivation.

Online Data Collection

There may be some concern amongst researchers as to the data quality collected using online data platforms owing to reports that certain platforms such as Amazon's Mechanical Turk (MTurk) has a large pool of excessively active individuals, who are being dubbed "professional survey-takers"; thus, having a negative impact on the data quality due to factors such as poor attention (Keith et al., 2017). However, other studies examining data collected through MTurk and more recently platforms such as Prolific (Peer et al., 2017), and CloudResearch's Prime Panels (Chandler et al., 2019, but see Thomas & Clifford, 2017 for review) hold the consensus that online platforms provide, in most cases, satisfactory data quality. Moreover, and of specific poignance to this thesis, Peer et al.'s (2021) review of Prolific (among other platforms) indicated data quality that was by far the most superior in terms of participant attention, comprehension, and honesty across two independent samples, relative to on-site data collection. Therefore, whilst important to be cautious when collecting online data, there is no justifiable reason to doubt the quality of data generated within this thesis, especially as this method allowed me to screen out repeat responders across individual studies within the thesis.

Longitudinal Data

Previous research conducted over time investigating psychopathic traits is typically driven by forensic samples and focuses on deficits rather than the potential psychological advantages (e.g., Lynam et al., 2007). Furthermore, this applies to more recent studies investigating successful psychopathy (e.g., Lasko & Chester, 2020), who focused on a lack of recidivism as the successful characteristic. A 6-month longitudinal element was incorporated within this thesis and demonstrated that the SPS has excellent reliability and generalisability, which not only used a more refined definition of successful psychopathy, it was also conducted in a general population sample. However, due to the time constraints of

completing a thesis, I was unable to assess the development and enduring/stable characteristics of successful psychopathy across important life stages, such as throughout adolescence. Prototypical psychopathic traits in youth have been shown to be an important construct as they predict violent and nonviolent offending behaviour, recidivism, and poorer treatment response, as well as emotional and cognitive impairments similar to those seen in adults with prototypical psychopathic traits (Corrado et al. 2004; Salekin et al. 2004). However, these studies indicate a factorial approach to measuring psychopathic traits and do not allow for the existence of sub-types, presenting a gap in our knowledge of psychopathic presentation.

Furthermore, as of now it is unclear how successful psychopathy may present itself in youth groups, however we know that adolescence represents the period when a child develops into an adult (Erikson, 1950) and experiences many neurocognitive changes (Giedd et al., 1999), including personality traits and characteristics. Therefore, this presents as a timepoint of interest for personality researchers, in part as it is the time when identity is formed (Marcia, 1996). In regard to successful psychopathy, we would expect to see similarities in presentation and manifestation as per previous literature on prototypical psychopathy, however, as personality is still developing during this time period there may be scope for interventions targeting well-being and resilience in order to support the development of positive adjustment traits hopefully incurring academic and personal success, whilst providing a scaffold to avoid antisocial behaviours driven by the maladaptive tendencies associated with the psychopathy construct as a whole (e.g., impulsivity).

Psychometric Measures

Validation

In general, no single operationalisation is definitive for capturing a psychological construct or group of constructs (Cronbach & Meehl, 1955; Loevinger, 1957), which makes measurement development and validation initially difficult and subject to scrutiny. Currently, the debate in psychology about measurement and validity is expanding. Much-needed emphasis has been focused on "questionable measuring procedures" and the hazards to the internal, external, statistical, and construct validity of new scales (Flake & Fried, 2019). In general, discourses regarding validity have been under-represented in discussions about replication, theory, and confidence crises in psychology (see Oberauer & Lewandowsky, 2019; Pashler & Wagenmakers, 2012). This is due, in part, to the difficulty of defining validity as a concept (Borsboom et al., 2004), but it is also owing to difficulties in statistically demonstrating validity. As with the current thesis, 'validation' is a process of linking novel measures, with their measurement and construct assumptions, with similar extant measures in a problematic 'jingle-jangle' fallacy. These attempts at psychopathy validation may be converging on participant response patterns or latent characteristics that have been misidentified by different studies (Davidson et al., 2020). The operationalisation of novel psychological constructs continues to be a challenge for the entire field of psychology; therefore, it is critical to use robust methodology, as utilised within this thesis, such as Item-Response Theory (see DeMars, 2010) and Generalisability Theory (see Medvedev et al., 2017), to establish the psychometric properties of a newly developed scale before progressing on to validation stages.

Self-Report Data and Psychopathy

This thesis employed the use of self-report measures for each study, whilst typically considered reliable ways of obtaining data as they can assess response styles systematically, which is not included in interviews (Ben-Porath, 2013). However, Lilienfeld and Fowler (2006) identified numerous possible challenges with using self-report methods to evaluate

psychopathic traits, including the possibility of deceitful responses and the issue of limited insight. This could be considered a potential limitation of this thesis as all the studies within this thesis relied on self-report measures to measure psychopathy. Exclusive reliance of a single measurement method presents concerns regarding shared method variance, which could have artificially inflated estimates of the correlations found in the studies. However, a previous meta-analysis reported that individuals higher on psychopathy tend not to engage in positive impression management in most research (Ray et al., 2013), which is consistent with the ruthless self-interest of more psychopathic individuals as there may be limited motivation to distort their responses for research. Furthermore, interview methods which may be considered less prone to response distortion, tend to produce the same results as self-report measures (Camp et al., 2013; Lynam et al., 1999; Marcus & Norris 2014; Seibert et al., 2011; Vitacco et al., 2014), indicating self-report as viable for examining personality traits.

Operationalisation of Success.

Within Chapter 1, this thesis discussed the difficulties with operationalising success due to its many different interpretations and applications, however each of the included studies within this thesis aimed to target varying types of success and ways in which to measure this unique construct to demonstrate applicability of the scale to wide domains. Success can be generally defined as both intrinsic (e.g., satisfaction) and extrinsic (e.g., wealth) in nature and can refer to accomplishment of both short-term (e.g., task performance) and long-term (e.g., career advancement) goals. Whilst it is beyond the scope of a single thesis to examine and explore all potential manifestations of success, this thesis covered socioeconomic status, relationship experience, life success, decision-making, and workplace skill. Each of the selected domains are notably discussed in regard to psychopathy, and these particular areas were selected to hopefully further differentiate psychopathy sub-types, for example prototypical psychopathy has been reported to be negatively associated with lower

socioeconomic status (Walsh & Kosson, 2007), higher relationship anxiety and avoidance (Conradi et al., 2016), poor decision-making (Blair et al., 2006), and counter-productive workplace performance (Blickle & Schütte, 2017). However, in the case of successful psychopathy, it would be expected that these detrimental outcomes would be lessened or absent.

Lastly, it would be beneficial to expand future studies to investigate other attributes of success such as resilience and health, both of which have previously been associated with higher intrinsic (e.g., Kotera et al., 2021) and extrinsic success (Han et al., 2021). Additionally, it would be useful to assess the applicability of the SPS to further outcomes which can be empirically measured such as academic achievement, professional satisfaction, and performance (e.g., learning, attention, and accuracy). These applications would be beneficial as it would allow researchers to identify the most prominent areas successful psychopathy is advantageous, which could then be used to develop targeted interventions or skills-based training to further support individual development across these fields.

Future Directions

As mentioned previously, there currently exists a replication crisis across psychology as a whole (see Oberauer & Lewandowsky, 2019), therefore initial future research would focus primarily on replicating the findings within this thesis, providing further construct validity against similar and correlated constructs such as Machiavellianism and narcissism, expanding studies to cover international samples, undertaking comparative analyses further exploring the differences between prototypical psychopathy, successful psychopathy, and general populations, and collecting additional data to support the behavioural pilot findings.

Whilst the behavioural pilot was able to tap into the differences in decision-making approaches between high successful psychopathy and low successful psychopathy,

suggesting that those who score higher were better decision-makers, it did not address impulsivity and risk-taking components more specific to often cited maladaptive tendencies within the psychopathy domain. Thus, future studies may be designed to both replicate the original findings and examine the underlying mechanisms between trait impulsivity and risk-taking within successful psychopathy. There are several options, such as [1] the go-/no-go task (Reynolds & Jeeves, 1978) which is useful in assessing behavioural inhibition; and [2] risk-taking (e.g., Balloon Analogue Task; Hunt et al., 2005), in both it is to be expected that individuals scoring high on successful psychopathy would demonstrate greater levels of behavioural inhibition and reduced risk-taking, which would add the findings of this thesis in regard to potential superior executive functioning in high successful psychopathy.

The application of the SPS will be divided between advancing research in the field of psychopathy, as discussed above, and the development and implementation of workshops targeting leadership skills and resilience to stress. Qualities of good leadership include good decision-making, resilience, confidence, and aspiration (see Olanrewaju & Okorie, 2019), each of which is either present within the successful psychopathy construct as a trait or as a positive outcome of higher scores on the scale. Theoretically, successful psychopathy encompasses the qualities of an ideal leader (e.g., confidence, social skills, immunity to stress, good decision-making), and would be useful to explore as an avenue for increasing these certain traits and outcomes within the general population. Moreover, the SPS has demonstrated strong positive associations with political skill, which is rooted in communication skills and networking abilities, which are desirable attributes for employers at all levels (Ng et al., 2005). Within the US, over eighty-seven billion was spent on corporate training programmes in 2018, this is likely to be less within the UK, however it will still be costing business organisations greatly. If the SPS could be applied to the development of workshops targeting leadership and management performance, which its trait components

and predictive power indicate it could be, this would be an ideal output from this thesis. Furthermore, whilst the scale has not been tested within clinical or forensic populations, the adaptive traits associated with successful psychopathy would still be present on the spectrum of prototypical psychopathy, albeit to a lesser degree, indicating there may be applicability to interventions targeted at individuals with high psychopathic traits who have offended or are engaging in antisocial behaviours.

Thesis Conclusion

This thesis aimed to develop and validate a novel measure of successful psychopathy to be used within general population samples, and to evaluate its efficacy in predicting outcomes associated with success. Initially, this body of research began with a systematic review of the current literature on successful psychopathy in order to develop a testable theoretical framework, which was a novel and unique contribution to the field. The findings from said review indicated features such as social potency, stress immunity, and cognitive functioning as key components within the successful psychopathy construct. Using the ascertained theoretical underpinnings, the Successful Psychopathy Scale (SPS) was created for use in measuring successful psychopathic traits within the general population.

The SPS demonstrated excellent reliability and generalisability as a psychometric measure across four independent studies, as well as demonstrating good convergent validity with existing measures of prototypical psychopathy across the affective and interpersonal domains as expected. An application of these findings would be as support to existing psychopathy literature which positions psychopathic traits as dimensional and existing along a spectrum within general populations (e.g., Edens et al., 2006; Guay et al., 2005; Walter et al., 2008). Moreover, whilst the SPS predicted higher success expectancy than prototypical psychopathy, motivations between the two groups were similar, favouring status and wealth over family and social responsibilities, further emphasising the dimensionality of the

construct whereby traits do not always covary and there can be unique differences in trait-configuration. Additionally, the SPS was associated with high proactive and low reactive aggression, as well as increased cognitive empathy and intact cognitive skills, all of which have application to successful life outcomes, both intrinsically (e.g., well-being) and extrinsically (e.g., financial).

Furthermore, these findings indicate that the construct of successful psychopathy as a psychopathy sub-type can be both qualitatively and quantitatively defined and measured within general population samples. The development of the successful psychopathy scale was approached incorporating over a decade of theoretical literature within the field, employing robust tools for psychometric scale development such as Rasch analysis and Generalisability Theory, as well as the implementation of three independent validation studies which supported the convergent and predictive validity of the scale. The long and short forms of this newly developed scale represent a novel and necessary advancement in the field of successful psychopathy which can be applied to the areas of personality research, occupational psychology, and well-being.

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