REVIEW ARTICLE

Taking an elemental approach to the conceptualization and measurement of Machiavellianism, narcissism, and psychopathy

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Abstract

The study of aversive or 'dark' personality traits (e.g., Machiavellianism, narcissism, and psychopathy) is afflicted by three types of issues. Measures of aversive traits that are meant to assess the same traits often capture different content—an issue of jingle. Measures that are meant to assess *different* traits often capture *near-identical* content—an issue of jangle. Finally, disagreement over what unites aversive personality traits leads to different conclusions about what is and is not an aversive personality trait—an issue of conceptual centrality. This study outlines how decomposing personality traits into smaller elements can address these three issues. It also provides a primer on the history and assessment of these traits and sets an agenda for future research.

1 | INTRODUCTION

It has now been 42 years since Hare (1980) formalized his checklist for assessing psychopathy; 52 years since Christie and Geis (1970) published their treatise on Machiavellianism; 43 years since Raskin and Hall (1979) brought narcissism back into the fold of personality psychology; and 20 years since Paulhus and Williams (2002) noted the similarities among these traits and proposed that they form a 'Dark Triad' of personality. And yet—even with multiple decades of research amounting to thousands of articles—the study of these 'dark'[1] or aversive personality traits is still very much mired in confusion. Much of this confusion revolves around a seemingly simple question: What is in a trait?

Theories of personality are intended to describe patterns of emotions, behaviours, thoughts, and desires across space and time (Revelle, 2008). Psychologists studying aversive personality traits must, therefore, decide which of these patterns constitute each trait, which of these patterns do not constitute each trait, and which of these patterns are present across the traits. Researchers of aversive personality traits remain divided on these three questions, leading them to arrive at incongruous or even irreconcilable conclusions. While this study does not resolve these

disagreements by proposing one *true* conceptualization of aversive personality traits, it does describe a promising approach for formally describing these different conceptualizations. In doing so, it has three goals.

The first goal is to review the prominent conceptualizations and popular self-report measures of aversive personality traits. It is important to avoid reifying measures by mistaking them for the constructs they are meant to assess (Whitehead, 1925), but we believe it is essential to discuss the measures here because they largely reflect how researchers have conceptualized the content of these traits. This review can then serve as a primer for researchers new to the field.

The second goal is to highlight common issues related to the content of these traits. Most can be categorized into one of three types (see Figure 1): *issues of jingle*, *issues of jangle*, or *issues of conceptual centrality*. Issues of jingle concern disagreement over what each of the three personality traits includes. By way of example, researchers have been locked in a protracted debate over what constitutes the central and peripheral features of both psychopathy (see Watts et al., 2017) and narcissism (see Miller, Lynam, et al., 2017). We refer to such controversies as issues of jingle because it is easy for researchers to commit the *jingle fallacy* by assuming conceptualizations with the same name are assessing the same thing (Thorndike, 1913). Issues of jangle occur when putatively distinct traits share too much content. For instance, Machiavellianism is theoretically distinct from psychopathy, but empirically they are nearly indistinguishable (Miller, Hyatt, et al., 2017). We refer to these problems as issues of jangle because it is easy for researchers to commit the *jangle fallacy* by assuming conceptualizations with different names are assessing different things (Kelley, 1927). Issues of conceptual centrality are disagreements about the shared features of these traits. Unlike issues of jingle, which involve traits sharing too little variance, and unlike issues of jangle, which involve traits sharing too much variance, issues of conceptual centrality concern what the shared variance among the aversive traits represents. Researchers have, at times, argued that aversive personality traits are united by callousness (Paulhus, 2014), an exploitative life history strategy (Jonason et al., 2010; Jonason & Tost, 2010), and antagonism (i.e., low agreeableness; Vize et al., 2019, 2020), among various other constructs. What constitutes the core of these traits is not only central to our understanding of aversive personality traits but also has significant bearing on what can and cannot be considered an aversive personality trait.

The third goal is to describe how an elemental approach can address these issues of jingle, jangle, and conceptual centrality. By decomposing the components of ostensibly distinct traits into smaller, often purer, facets, an elemental approach provides a shared method and language for describing the common and unique content of aversive traits, thereby revealing which aspects of the traits are implicated in the issues described above. For the present review, we primarily focus on past efforts using the Five-Factor Model of Personality (FFM; Costa & McCrae, 1992) to describe aversive personality traits in terms of the facets underlying extraversion (e.g., warmth, assertiveness), agreeableness (e.g., modesty, straightforwardness), conscientiousness (e.g., dutifulness, deliberation), neuroticism (e.g., self-consciousness, depression), and openness to experience (e.g., openness to ideas, openness to feelings). We conclude by proposing some empirical and theoretical directions for extending and further refining the elemental approach.
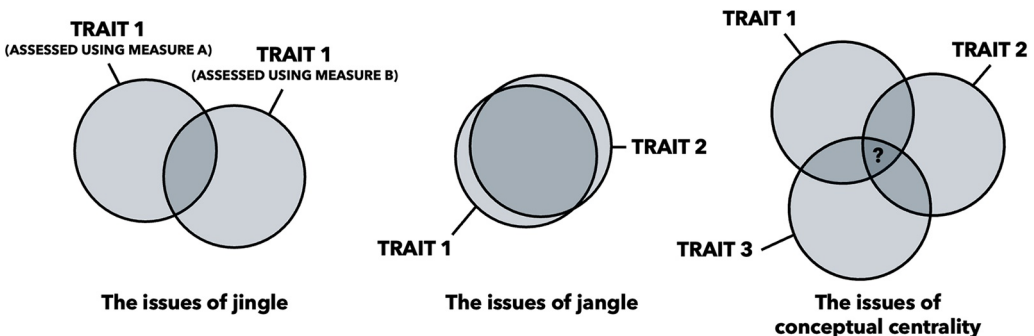

FIGURE 1 Three issues that afflict the study of aversive personality traits

We also discuss limitations of the elemental approach and describe how multiple approaches might be used in concert to further our understanding of aversive personality traits.

2 | THE DARK TRIAD

In this section, we discuss the history and measurement of psychopathy, Machiavellianism, and narcissism and describe how an elemental approach can help clarify a significant point of contention for each trait.

2.1 | Psychopathy

Although the intellectual history of psychopathy goes back to the late 1800s (Eghigian, 2015), the publication of *The Mask of Sanity* (Cleckley, 1941) launched the study of psychopathy as we know it today. Drawing on his experience working with clients and patients in Augusta, Georgia, Hervey Cleckley outlined 16 characteristics that he believed represented psychopathy. This included the expected negative aspects—such as lying to others, engaging in illegal behaviours, and being self-centred—but also a number of ostensibly positive elements, including superficial charm and a lack of nervousness. Cleckley viewed these positive aspects as forming a *mask of sanity* that obscured the more insidious elements of the construct. By the end of Cleckley's life in 1984, however, the study of psychopathy had fallen mostly out of favour. This was due, in part, to the absence of any structured way of assessing the trait.

2.1.1 | Measurement

Nearly 40 years later, Robert Hare convened a group of clinicians to develop a formal assessment based on Cleckley's original conceptualization. Hare had been working as the sole psychologist at a maximum-security prison and had interviewed countless men who fit Cleckley's description (Hare, 2011). They were reckless, ruthless, and conniving but, without a formal way of assessing these traits, could not be easily distinguished from the rest of the prison population. Frustrated by this, Hare set out to develop a 'checklist for the assessment of psychopathy' (p. 114; Hare, 1980).

The result was the aptly named *Psychopathy Checklist* (PCL; Hare, 1980), a list of 22 or—in the case of the revised version (PCL-R; Hare, 1991)—20 characteristic features of psychopathy. These features could be organized into two factors (Hare et al., 1990), which could, in turn, be separated into two facets (Hare & Neumann, 2005). *Factor 1* included the *Interpersonal Facet*—characterized by manipulativeness and deceit—and the *Affective Facet*—characterized by an inability to accept responsibility for one's actions and a lack of empathy and remorse. *Factor 2*, in contrast, included a *Lifestyle Facet*—characterized by irresponsibility and impulsivity—and an *Antisocial Facet*—characterized by poor behavioural controls and criminal versatility. To administer the PCL-R, a trained interviewer would conduct an interview with a person, review documentary evidence from their life (e.g., criminal records), and score the person on each of the 20 features of the PCL-R.

Despite its strengths, the dependence of the PCL-R on trained interviewers and documentary evidence proved prohibitive for many researchers. The *Self-Report Psychopathy Scale* (Hare, 1985), which assessed the characteristics of the PCL using a self-report survey, became a popular alternative. The first edition of the SRP had 29 items and was only moderately correlated with other measures of psychopathy. The second edition had 60 items and adopted the two-factor structure of the PCL. The widely used third edition (SRP-III)—and its near-identical successor, the SRP-4 (Paulhus et al., 2016)—had 64 items and was further revised to mirror the two-factor, four-facet structure of the PCL-R.

Whereas the PCL-R and the SRP were initially developed with forensic populations in mind, two scales introduced in the 1990s were specifically designed to be suitable for non-institutional populations. The first, the *Levenson Self-Report Psychopathy Scale* (LSRP; Levenson et al., 1995), was initially developed as a 26-item measure of *Primary Psychopathy* and *Secondary Psychopath*. Later efforts, however, found support for a 19-item three-factor solution, which included psychopathic *egocentricity*, *antisociality,* and *callousness* (Brinkley et al., 2008; Sellbom, 2011). Despite showing a better fit to the data, the three-factor solution can, nevertheless, result in unexpected or, at times, counter-intuitive associations (Salekin et al., 2014). To address this issue, an expanded, 31-item version of LSRP was introduced, allowing for the extraction of three factors while having better construct validity than its predecessor (Christian & Sellbom, 2016).

The second measure intended for non-forensic contexts was the 187-item *Psychopathic Personality Inventory* (PPI; Lilienfeld & Andrews, 1996). Lilienfeld and Andrews designed the PPI to only assess the non-behavioural aspects of psychopathy, hoping it would be sensitive to people who had psychopathic personality characteristics but did not behave in prototypically 'psychopathic' ways (see Lilienfeld, 1994). The original PPI, as well as the 154-item revised version (PPI-R; Lilienfeld & Widows, 2005), divides psychopathy into eight features, seven of which comprise two orthogonal factors (Benning et al., 2003, 2005; but see also; Neumann et al., 2008). The first factor—self-centered impulsivity—includes Machiavellian egocentricity, carefree nonplanfulness, rebellious nonconformity, and blame externalization. The second factor—fearless dominance—includes social influence, fearlessness, and stress immunity. The eighth feature, coldheartedness, does not load on either factor and is often treated as a third superordinate factor.

2.1.2 | An issue of jingle

The primary issue facing the study of psychopathy is disagreement over which features are central to the construct. Researchers have debated whether impulsivity (e.g., Levenson, 1993; Poythress & Hall, 2011), antisociality[2] (Hare & Neumann, 2010; Skeem & Cooke, 2010a, 2010b), and various non-pathological traits[3] (e.g., fearlessness; Crego & Widiger, 2016; Lilienfeld et al., 2012, 2016; Miller & Lynam, 2012; Miller, Lamkin, et al., 2016) should be considered integral to the definition. A difference of three traits may not seem particularly consequential, but it can have a significant impact on the empirical landscape. Armed with different conceptualizations, researchers are apt to develop measures of psychopathy that index different things. As a case in point, the SRP-III explains only 38.44% and 26.42% of the variation in LSRP and PPI-R scores, respectively (Miller & Lynam, 2012; Paulhus et al., 2016). Likewise, the LSRP only explains 37.21% of the variation in PPI-R scores (Watts et al., 2017). The diverging assumptions that underlie these measures contribute to the jingle fallacy, as researchers may falsely believe that different measures of psychopathy are assessing near-identical content.

2.1.3 | An elemental approach

One promising approach for identifying differences among the conceptualizations of psychopathy is to apply a common framework of relatively narrow traits. Lynam and colleagues (see Lynam & Miller, 2015) have spearheaded one such approach using the facets of the FFM (Costa & McCrae, 1992). By combining work translating the features of the PCL-R into the language of the FFM (Widiger & Lynam, 1998) with work generating an FFM-based profile of prototypical psychopathy from the ratings of 15 psychopathy experts (Miller et al., 2001) and work examining the zero-order correlations among the FFM facets and the SRP, LSRP and PPI (Lynam & Widiger, 2007; Miller et al., 2001), Lynam and colleagues (2011) created what they called the *Elemental Psychopathy Assessment* (EPA). The 178-item measure—as well as its 72-item short form (Lynam et al., 2013) and 18-item super-short form (Collison et al., 2016)—

assesses psychopathy using 18 factors based on the facets of the FFM. These 18 factors can be combined into four higher-order factors: antagonism (i.e., coldness, distrust, manipulativeness, self-centeredness, and callousness); emotional stability (i.e., unconcern, self-contentment, and invulnerability); disinhibition (i.e., urgency, thrill-seeking, opposition, disobligedness, impersistence, and rashness); and narcissism (i.e., anger, self-assurance, dominance, and arrogance; Few et al., 2013).

In the process of developing the EPA, the researchers were able to identify the shared and unique features of the SRP-III, LSRP, and PPI-R (see Figure 2). All three were associated with coldness, manipulativeness, and anger, but the SRP-III and LSRP also showed a greater association with impulsivity. The LSRP included several additional and ostensibly negative personality traits, including heightened levels of depression, self-consciousness, and vulnerability. In contrast, the PPI-R showed greater associations with ostensibly adaptive and non-pathological personality traits, including self-assurance, invulnerability, and assertiveness.

This research does not tell us what the one *true* conceptualization of psychopathy should be. It does, however, provide a shared language for discussing how measures of psychopathy differ and, in doing so, provides insight into the unclear and often incongruous findings identified by researchers using different measures. It can help explain why, for example, psychopathy as measured by the SRP-III is so often associated with aggressive and erratic behaviour (Muris et al., 2017) while psychopathy as measured by the PPI-R is so often associated with acts of heroism (e.g., Smith et al., 2013). Specifically, the SRP-III taps impulsivity, whereas the PPI-R taps a sense of invulnerability. By identifying the features of personality that are assessed by some measures of psychopathy but not by others, an elemental approach can pinpoint the aspects of the measures that are causing the issues of jingle that have long confounded the study of psychopathy.
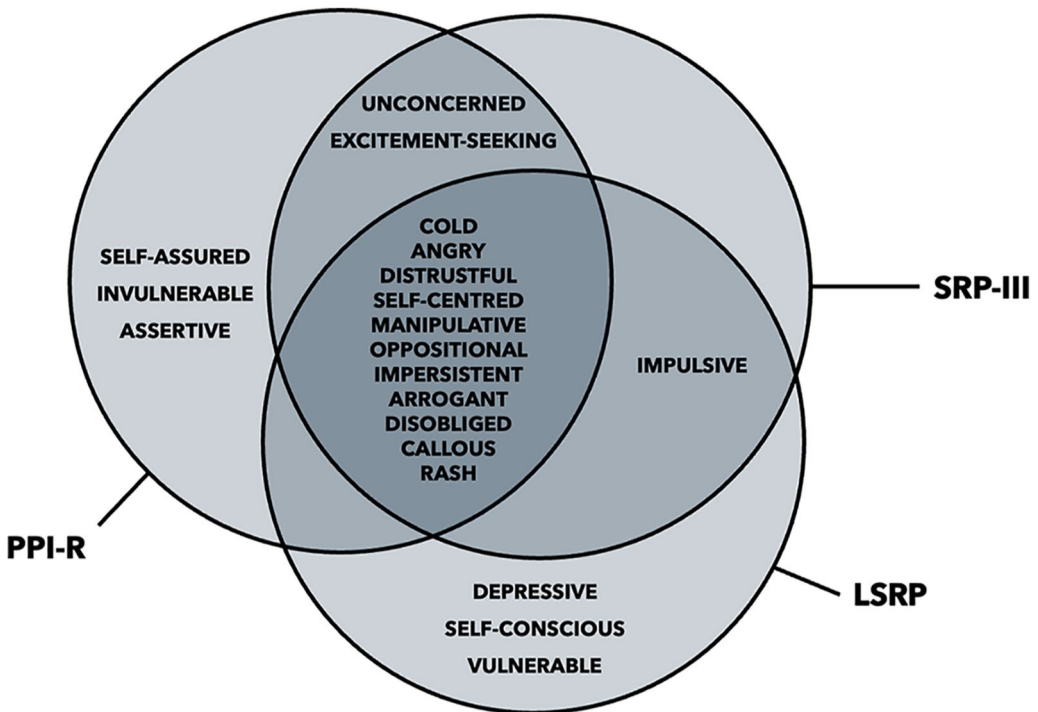

FIGURE 2 An elemental approach to psychopathy using the correlations between the Five-Factor Model and the SRP-III, LSRP, and PPI-R (Lynam et al., 2011)

2.2 | Machiavellianism

The term *Machiavellianism* is derived from the name of the sixteenth-century, Italian diplomat Niccolò Machiavelli (1469–1527). Acting in his role as a political consultant to the Medici family, Machiavelli proffered advice on how to best rule effectively. His pragmatic guidance, collected in *The Prince* (Machiavelli, 1532/2006), can be summarized as 'the ends justify the means.' Accordingly, the eponym *Machiavellianism* refers to a caustic cocktail of duplicity and cunning.

2.2.1 | Measurement

Although alternatives exist (e.g., the *Machiavellian Personality Scale*; Dahling et al., 2008), a single measure has dominated the study of Machiavellianism: the *Mach-IV* (Christie & Geis, 1970). As detailed in *Studies in Machiavellianism* (Christie & Geis, 1970), Richard Christie and colleagues theorized that an effective manipulator lacks empathy, is not committed to any one ideology, is unconcerned with the trappings of conventional morality, and is free from any 'gross pathologies' that might interfere with their ability to manipulate others. Using this framework and Machiavelli's writings for guidance, Christie and colleagues developed an initial pool of 71 items to measure Machiavellianism. That pool was eventually pared down to the 20 items that became the Mach-IV.[4] The scale was initially purported to measure manipulative tactics, a cynical view of human nature, and a lack of conventional morality, but later efforts have found support for only two factors: Machiavellian tactics and Machiavellian views (see Fehr et al., 1992).

2.2.2 | An issue of jangle

The immense popularity of the Mach-IV provides little opportunity for jingle. When a researcher mentions Machiavellianism, they almost certainly mean Machiavellianism as measured by the Mach-IV. Instead, the primary issue with Machiavellianism is jangle, the assumption that two constructs describing the same content are different because they have different names.

As conceptualized by Christie and Geis (1970), Machiavellianism is theoretically distinct from psychopathy. Empirically, however, Machiavellianism is a near-facsimile of psychopathy. McHoskey and colleagues (1998) reported that psychopathy explained 45.00% of the variation in Machiavellianism scores. Recent meta-analytic efforts have likewise indicated that, depending on the exact measure one is using, psychopathy can explain between 32.49% and 37.21% of the variation in Machiavellianism scores (Muris et al., 2017). Notably, this is greater than the overlap between some psychopathy measures (Miller & Lynam, 2012). Furthermore, both Machiavellianism and psychopathy demonstrate troublingly similar associations with the FFM (O'Boyle et al., 2015; Vize et al., 2018). Miller and colleagues (2017b) found that the associations between Machiavellianism and the FFM facets were more similar to what experts would expect for psychopathy than what they would expect for Machiavellianism. Specifically, Machiavellianism was negatively associated with nearly every facet of conscientiousness. This is highly problematic given that the reckless abandon characteristic of theoretical psychopathy is, in many ways, antithetical to the cold cunning characteristic of theoretical Machiavellianism. The standard measure of Machiavellianism appears, therefore, to be poorly aligned with not only experts' understanding of Machiavellianism but also Machiavelli's own writings.

2.2.3 | An elemental approach

To address this issue, Collison and colleagues (2018) adopted an elemental perspective to develop the 52-item Five-Factor Machiavellianism Inventory (FFMI) and, later, the 15-item FFMI Short Form (Du et al., 2021). Starting with

ratings of how experts believe Machiavellianism should relate to the FFM, the researchers identified 13 subscales that could be arranged into three domains: (1) antagonism (i.e., selfishness, immodesty, manipulativeness, callousness, and cynicism), (2) agency (i.e., achievement-oriented, active, assertive, competent, self-confident, and invulnerable), and (3) planfulness (i.e., deliberate and ordered). This made explicit what should be common and unique to Machiavellianism and psychopathy (see Figure 3). Namely, as measured by the FFMI and the EPA, Machiavellianism and psychopathy both consist of callousness, manipulation, arrogance, and distrust. However, while psychopathy also includes aspects of rashness, impersistence, and impulsivity, Machiavellianism includes aspects of order, achievement orientation, and competence.

By clarifying the precise features of personality that distinguish Machiavellianism from psychopathy, an elemental approach can help researchers ensure that the measurement of Machiavellianism aligns with the theoretical concept of Machiavellianism. The FFMI was specifically designed to include not only elements of antagonism and agency but also elements of planfulness. As a consequence, the FFMI appears to accurately reflect the calculated manipulation characteristic of theoretical Machiavellianism, which was not the case for prior measures. As a case in point, the FFMI is associated with premeditation and persistence (Collison et al., 2018) whereas the Mach-IV is associated with impulsivity, risk-taking, and reactive aggression (Muris et al., 2017; Sleep et al., 2017; Vize et al., 2018). This is all to say that an elemental approach can be an invaluable tool for resolving the issues of jangle that afflict the study of Machiavellianism.

2.3 | Narcissism

The term narcissism originates with the myth of Narcissus (Lang, 2007). After callously rejecting Echo and several other wood nymphs, Narcissus—a remarkably beautiful hunter—was cursed by Nemesis. As he knelt to drink from a pool of water, he fell deeply in love with his own reflection and eventually lost the will to live. Unsurprisingly, *narcissism* came to describe people who have an inordinate focus on the self.

Among the general public, this excessive focus on the self is often assumed to be positive. As early as 1971, however, researchers were distinguishing between two dimensions of narcissism. Some researchers labelled these two dimensions *horizontally split* and *vertically split* narcissism (Kohut, 1971), while others labelled them *overt* and *covert* narcissism (Akhtar & Thomson, 1982). Still others used the terms *egotistical* and *dissociative* (Broucek, 1982); *thick-skinned* and *thin-skinned* (Rosenfeld, 1987); *oblivious* and *hypervigilant* (Gabbard, 1989); *empowered* and *disempowered* (Cooper & Maxwell, 1995); and *unprincipled* and *compensatory* (Millon, 1996). Although the specifics vary
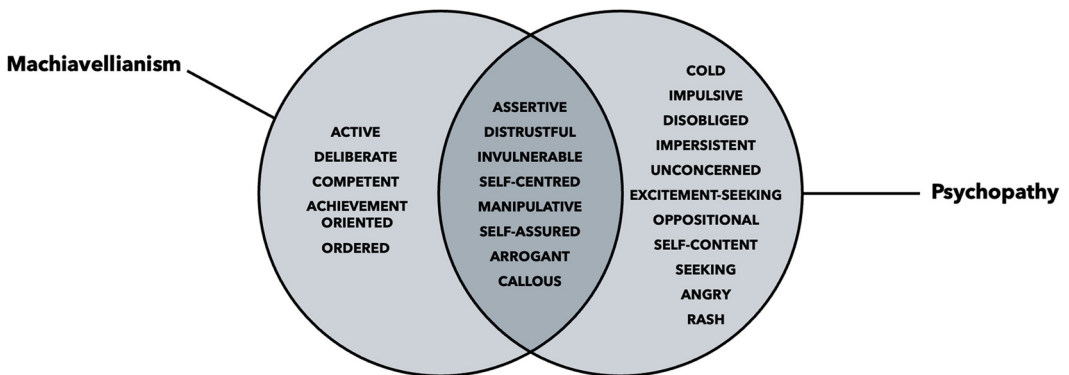
FIGURE 3 An elemental approach to the overlap between psychopathy and Machiavellianism as captured by the Elemental Psychopathy Assessment (Lynam et al., 2011) and the Five-Factor Machiavellianism Inventory (Collison et al., 2018)

from one conceptualization to the next, most of these distinctions can be thought of as distinguishing between two themes of narcissism: *grandiosity* and *vulnerability* (Cain et al., 2008).

Both grandiose and vulnerable narcissism are characterized by self-centeredness, egocentrism, and callousness (Wink, 1991). But, while grandiose narcissism adds an elevated sense of oneself, a desire for attention, and fantasies of grandeur, vulnerable narcissism adds a diminished sense of oneself, excessive self-criticism, and social withdrawal. Although vulnerable narcissism has received considerable attention in the clinical literature (Miller & Campbell, 2008), grandiose narcissism has all but dominated the study of narcissism as a subclinical personality trait. Part of this dominance may owe to the overwhelming popularity of the *Narcissistic Personality Inventory* (NPI; Raskin & Hall, 1979).

2.3.1 | Measurement

Although psychologists have been using the term 'narcissism' for over 100 years (e.g., Ellis, 1927; Freud, 1914/1957), it came to be known in its more modern sense with the publication of the third edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-III; American Psychiatric Association, 1980). Robert Spitzer, the chairman of the DSM-III task force, had given his team the mandate of standardizing the diagnosis of mental disorders, which included, in part, expanding the number of disorders in the DSM. One of these new disorders was *narcissistic personality Disorder*.

Even before the ink had dried on the new DSM, Raskin and Hall (1979) introduced the NPI as a subclinical measure of the disorder. It initially included 54 pairs of statements, with participants choosing between a narcissistic (e.g., 'I think I am a special person') and non-narcissistic (e.g., 'I am no better or worse than most people') option. It also included eight factors, reflecting each of the eight diagnostic criteria for narcissistic personality disorder. However, after a competing four-factor solution was proposed (Emmons, 1984, 1987), Raskin and Terry (1988) reanalyzed the NPI and found support for a 40-item, seven-factor model, including authority, self-sufficiency, superiority, exhibitionism, exploitativeness, vanity, and entitlement. The NPI-40, as it came to be known, remains the dominant measure of grandiose narcissism.

By comparison, there are two widely used measures of vulnerable narcissism. Noting the focus on grandiose narcissism in the existing literature, Hendin and Cheek (1997) set out to develop a measure that would better isolate the more vulnerable aspects of the construct. The result was the 10-item *Hypersensitive Narcissism Scale* (Hendin & Cheek, 1997). Despite not receiving much initial popularity—it was cited only 15 times in the decade following its introduction (Cheek et al., 2013)—it now appears to be the favoured instrument among researchers looking for a brief assessment of vulnerable narcissism.

The second popular measure of vulnerable narcissism is the 52-item *Pathological Narcissism Inventory* (Pincus et al., 2009; Wright et al., 2010). The measure includes three factors purported to assess grandiose narcissism—exploitativeness, grandiose fantasies, and self-sacrificing self-enhancement—and four factors purported to measure vulnerable narcissism—contingent self-esteem, hiding the self, devaluing others, and entitlement rage. We write 'purported' because several researchers have demonstrated that many of the grandiose subscales of the Pathological Narcissism Inventory tap content that is more akin to vulnerable narcissism than grandiose narcissism (Miller et al., 2011, 2014; Thomas et al., 2016; see also; Miller & Lynam, 2017).

2.3.2 | An issue of jingle

Similar to Machiavellianism, narcissism has, at times, been assumed to be just one part of psychopathy (e.g., Harpur et al., 1989). That said, narcissism explains substantially less variability in psychopathy scores—between 12.25% and 17.64% (depending on the measure)—than Machiavellianism does (Muris et al., 2017). Moreover, a recent simulation study has indicated that invalid responding may inflate correlations between narcissism and psychopathy by as much

as 0.16 (Holtzman & Donnellan, 2017), meaning the amount of shared variance could be as low as 3.61%–6.76% (depending on the measure).

The more pressing issue for narcissism is, as with psychopathy, a matter of jingle. Grandiose narcissism and vulnerable narcissism capture drastically different content, with some estimates putting the amount of shared variance between the two at as little as 12.04% (Kay, 2021). Therefore, incorrectly assuming a measure of grandiose or vulnerable narcissism is representative of narcissism as a whole, threatens to miss a substantial amount of information that is unique to each dimension.

2.3.3 | An elemental approach

Drawing from previous work that used clinicians to rate a prototypical case of narcissistic personality disorder on the FFM facets (Lynam & Widiger, 2001; Samuel & Widiger, 2004) and other work considering the associations among various narcissism measures and the FFM facets (Miller et al., 2010, 2011; Samuel & Widiger, 2008a, 2008b), Glover and colleagues (2012) developed the 15-factor, 150-item *Five-Factor Narcissism Inventory* (FFNI). The number of items was later pared down to 60 for the FFNI short form (Sherman et al., 2015) and 15 for the FFNI super-short form (Packer West et al., 2021). The original document for the FFNI explained how to combine the 15 factors into a measure of grandiose narcissism and a measure of vulnerable narcissism, but recent work has suggested that they can also be combined into three factors (Miller, Lamkin, et al., 2016; see also, 2011; Krizan & Herlache, 2018; Rogoza et al., 2022). Under this model, both types of narcissism are linked by a core of antagonism, including aspects of anger, callousness, entitlement, immodesty, distrust, manipulativeness, exploitativeness, and excitement seeking (see Figure 4). Grandiose narcissism is further specified by the inclusion of agentic extraversion, comprising aspects of assertiveness, gregariousness, an achievement orientation, and the tendency to fantasize. Vulnerable narcissism is further specified by the inclusion of neuroticism, comprising aspects of vulnerability, self-consciousness, and the tendency to feel shame.

Just as it cannot tell us whether psychopathy as conceptualized by the SRP-III or the PPI-R is *true* psychopathy, an elemental approach cannot tell us whether grandiose narcissism or vulnerable narcissism is *true* narcissism (nor should it). Instead, by identifying the features that are unique to each dimension, the elemental approach pinpoints how these two dimensions differ, thereby, helping to explain why they are so often associated with different outcomes. For example, knowing that vulnerable narcissism (but not grandiose narcissism) is defined by a sense of vulnerability, self-consciousness, and shame helps explain why vulnerable narcissism (but not grandiose narcissism) is associated with avoidant, dependent, and depressive personality disorders (Miller et al., 2013). As with psychopathy,
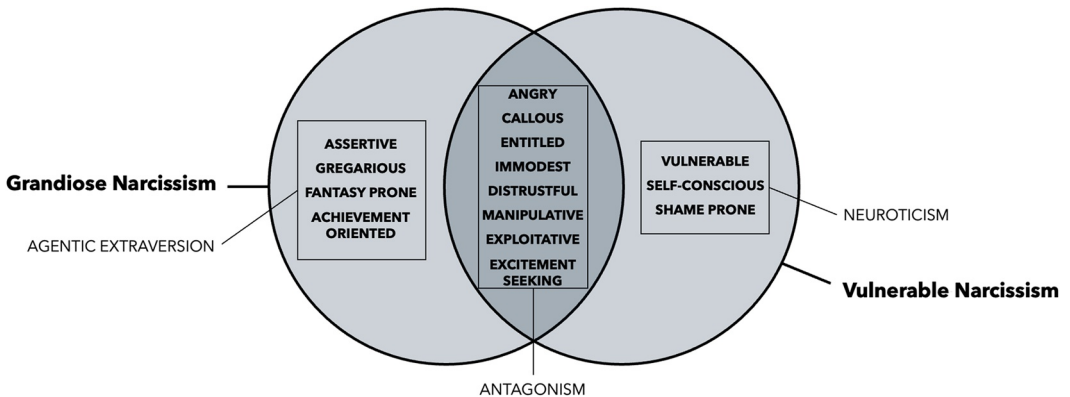

FIGURE 4 An elemental approach to narcissism using the three-factor solution to the Five-Factor Narcissism Inventory (Glover et al., 2012; Miller, Lamkin, et al., 2016)

an elemental approach can help us address the issues of jingle that complicate the study of narcissism by telling us why these two dimensions should not be subsumed under a single label.

3 | DARK POLYADS

Beyond the established triad, other candidates proposed as aversive personality traits include everyday sadism (see Chabrol et al., 2009), spitefulness (see Marcus & Norris, 2016), borderline personality disorder (Miller et al., 2010), and status-driven risk-taking (Visser et al., 2014). Marcus and Zeigler-Hill (2015) even called for the creation of a 'big tent' of aversive personality traits that would include not only aversive traits (e.g., greed) but also any trait associated with adverse outcomes over a broad range of contexts (e.g., perfectionism; dependency). This proposal raises an important question: What defines an aversive trait?

3.1 | An issue of conceptual centrality

One place to look for an answer to this question is in how these traits have traditionally been labelled. For example, one might reasonably conclude that 'dark' traits should include any trait that is judged to be 'dark'. Unfortunately, the label 'dark' provides very little insight into what these personality traits actually contain. 'Dark' can mean aversive or antagonistic, but it can also mean sullen, cynical, secretive, morbid, immoral, and menacing, among various other adjectives. With the lack of clarity in this term, it is unsurprising that such varied and, at times, contradictory traits (e.g., risk-taking and perfectionism) have been promoted as 'dark' personality traits.

A second place to look for an answer is in what unites the existing aversive traits. Researchers have proposed many theories about what lies at the nexus of these traits, including (1) callousness (i.e., a lack of empathy; Paulhus, 2014); (2) callousness *and* manipulativeness (i.e., Factor 1 psychopathy; Jones & Figueredo, 2013); (3) an exploitative life history strategy (Jonason et al., 2010; Jonason & Tost, 2010); (4) a 'Dark Factor' (i.e., a tendency to maximize positive outcomes for the self in such a way that results in negative consequences for others; Moshagen et al., 2018); (5) low honesty-humility (Book et al., 2015); and (6) low agreeableness (Vize et al., 2019, 2020). Many pages have been devoted to comparing the strengths and weaknesses of each perspective (e.g., Book et al., 2015; Vize et al., 2019), and a perfectly reasonable argument could be made that, in many cases, these traits are actually tapping the same content (e.g., Lynam et al., 2020; Sleep et al., 2020). However, only one of these theories has consistently been used to provide an elemental examination of the existing aversive personality traits: The low agreeableness or 'antagonism' perspective (Vize et al., 2019, 2020).

3.2 | An elemental approach to the Dark Triad traits

As measured by the EPA (Lynam et al., 2011), FFMI (Collison et al., 2018), and FFNI (Glover et al., 2012), psychopathy, Machiavellianism, and narcissism share a core of antagonism, including elements of distrustfulness, manipulativeness, self-centredness, arrogance, and callousness (see Figure 5). The only facet of antagonism that is *not* shared among these traits is oppositionality (i.e., the tendency to be stubborn and rebellious), which appears to be relatively unique to psychopathy.

Ultimately, the defining feature of any aversive personality trait is a theoretical issue. If researchers conclude the only thing that should define an aversive trait is an association with negative outcomes (e.g., Marcus & Zeigler-Hill, 2015), then dependency and perfectionism might very well qualify. If, however, researchers decide that any additional trait must share the same core features that connect the existing triad of aversive personality traits, an elemental approach can prove invaluable. This approach indicates that the existing aversive traits are 'antagonism-related' (Vize et al., 2019) and that some (e.g., spitefulness) but not all (e.g., dependency) of the candidate traits can be
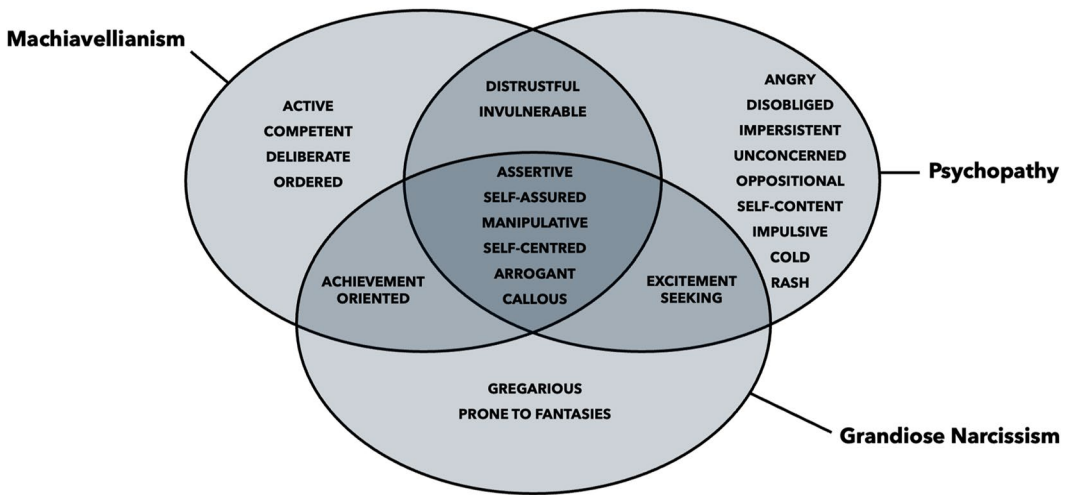
FIGURE 5 An elemental approach to the overlap between the Dark Triad traits as assessed by the Elemental Psychopathy Assessment (Lynam et al., 2011), Five-Factor Machiavellianism Inventory (Collison et al., 2018), and Five-Factor Narcissism Inventory (Glover et al., 2012). For legibility, vulnerable narcissism is not depicted

incorporated into this constellation. An elemental approach can, therefore, not only address the issue of conceptual centrality that has frustrated the study of aversive personality traits by telling us what is at the core of these traits but also help establish a criterion for evaluating new aversive personality traits.

4 | DISCUSSION AND FUTURE DIRECTIONS

We opened this review by suggesting that much of the confusion surrounding the study of aversive personality traits comes down to a relatively simple question: What is in a trait? It is precisely its ability to answer this question that makes the elemental approach so powerful for untangling the issues of jingle, jangle, and conceptual centrality that afflict the study of aversive personality traits. It resolves issues of jingle by clarifying the differences between traits that have different content but share the same label. In the case of psychopathy, it points to features that are captured by some measures of the construct but not by others, including impulsivity and invulnerability. In the case of narcissism, it helps distinguish between grandiose and vulnerable forms of the construct. Namely, both dimensions are united by antagonism, while grandiose narcissism adds aspects of agentic extraversion and vulnerable narcissism adds aspects of neuroticism.

It resolves issues of jangle by elucidating the overlapping nature of ostensibly distinct traits. Researchers can then ask whether these shared features are consistent with theory. If they are, it provides a better understanding of the interconnected nature of the traits. If they aren't, it suggests that the measures should be further refined to improve discriminant validity. In the case of Machiavellianism and psychopathy, both are theoretically associated with aspects of antagonism. But, while psychopathy should be associated with aspects of low conscientiousness, Machiavellianism should be associated with aspects of high conscientiousness. An elemental approach allows researchers to develop measures of Machiavellianism and psychopathy that better align with these theoretical distinctions.

Finally, the elemental approach can be used to identify the personality content that is at the nexus of these traits. This allows us to move beyond imprecise—and, in many ways, problematic—language to provide a more accurate description of the traits. The term 'dark', for example, provides very little information about the nature of these traits other than implying that they are bad in some vague and poorly articulated way. In contrast, the term *antagonistic* is explicit about what unites these traits (i.e., low agreeableness), providing a straightforward method for identifying

new aversive personality traits. Traits not associated with agreeableness, such as dependency and perfectionism, would not qualify as antagonistic personality traits, whereas traits that are associated with agreeableness, such as everyday sadism and spitefulness, would.

In sum, an elemental approach can not only help us resolve current issues related to the study of aversive personality traits but also provide a framework for conceptualizing these traits in the years to come. In closing, we propose three promising future directions for the elemental study of these traits.

4.1 | An elemental approach to candidate aversive personality traits

One proposed candidate for expanding the Dark Triad is everyday sadism. Paulhus and Dutton (2016) have argued that psychopathy and sadism are theoretically distinct, asserting that psychopathy entails apathy towards the suffering of others while sadism entails active enjoyment of the suffering of others. Nevertheless, sadism shows pronounced associations with psychopathy (Buckels et al., 2013) and has even been identified as a facet of some measures of psychopathy (Roy et al., 2021). In short, psychopathy and sadism have a jangle problem. The way forward for sadism researchers seems clear: Update measures of psychopathy so that they no longer capture content that should be unique to sadism. An alternative would be to treat sadism as another feature of psychopathy, but this adds yet another dimension to a construct that is all too often treated as unidimensional (Miller et al., 2019). Regardless of one's preferred solution, an elemental approach could aid in demystifying the overlapping nature of sadism and psychopathy, as well as other candidate aversive personality traits.

4.2 | Alternative models of personality

The FFM-based elemental approach to the Dark Triad traits has many strengths (see Lynam & Miller, 2015), but it also has a critical limitation. The FFM's emphasis on parsimony generates quite broad domains (e.g., openness to experience) that are necessarily less comprehensive (and thus have less predictive utility) than models with narrower factors. The FFM can be decomposed into 30 facets, but 30 facets derived from a 5-factor model are more constrained than a model that begins with 30 factors. For instance, you might find that agreeableness, as assessed using the FFM, includes altruism and tender-mindedness but content related to a tendency to hold prejudicial beliefs won't suddenly appear. By analogy, 30 songs selected from 5 genres of music will be less comprehensive than 30 songs selected from the universe of all possible genres of music. Less parsimonious models, such as the 20-Lexical-Factor Model of personality (Saucier & Iurino, 2019) or the 27-factor SAPA Personality Inventory (Condon, 2017), may be able to more thoroughly account for the unique and shared variance of each aversive trait.

4.3 | Using multiple approaches in concert

An elemental approach can reveal how the building blocks of aversive personality traits fit together. By decomposing narcissism into smaller elements, we learn about its content (e.g., antagonism, extraversion, and neuroticism) and its structure (e.g., grandiose narcissism and vulnerable narcissism are united by a core of antagonism). The elemental approach is helpful in sorting out issues of jingle, jangle, and conceptual centrality precisely because they are issues of content and structure.

An elemental approach cannot, however, tell us anything about *why* people differ on these traits. Knowing, for example, that psychopathy is associated with low levels of agreeableness does not tell us anything about the brain structures and pathways that underlie psychopathy. It also tells us nothing about life experiences that may be associated with the emergence of psychopathic behaviors. Such questions are better addressed by using a

neurobiological (e.g., Kiehl, 2006; but see also; Hyatt et al., 2021) or developmental (e.g., Jonason et al., 2014) approach. In other words, the best approach to a question about personality depends on the type of question. To further advance our understanding of aversive personality traits, it will be imperative to use multiple approaches in concert.

5 | CONCLUSION

Our three goals in this paper were to provide an overview of how aversive personality traits have been conceptualized and measured; identify unresolved issues of jingle, jangle, and conceptual centrality in both theory and measurement; and demonstrate the value of an elemental approach in resolving these issues. Although researchers may never fully agree on the *true* content of these traits, an elemental approach can, at the very least, provide a shared language for moving the conversation forward.

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ENDNOTES

[1] We encourage researchers to avoid using the term 'dark' to describe these traits. Not only is it imprecise (as is discussed in the present article), but it is also problematic insofar that it reinforces the association of 'darkness' with 'badness'. Since Paulhus and Williams (2002) chose the adjective 'dark' to refer to the socially aversive aspects of Machiavellianism, narcissism, and psychopathy (see Furnham et al., 2013), we use the term 'aversive' here. We appreciate that 'aversive' is also imprecise, but we purposefully chose it to draw a distinction between the vague way that these traits have traditionally been discussed and the more precise language afforded by an elemental approach (e.g., 'antagonistic personality traits').

[2] Both sides in this debate seem to agree that 'antisociality' (i.e., rule-breaking broadly construed) is a component of psychopathy and 'criminality' (i.e., behaviour that is proscribed by law) is not. Since criminality is not an explicit component of psychopathy, Hare and Neumann (2010) view Skeem and Cooke's (2010a, 2010b) critique of their measure as invalid. Skeem and Cooke, however, argue that the antisociality factor primarily assesses criminality.

[3] The inclusion of these non-pathological aspects of personality in models of psychopathy represents a move away from the more traditional treatment of psychopathy as a 'syndrome' (i.e., a collection of inter-correlated features or 'symptoms'; Hare, 2011). Namely, ostensibly adaptive aspects of personality, such as fearless dominance and boldness, are included in some measures of psychopathy but show little association with the other factors of their respective measures (Marcus et al., 2013; Miller & Lynam, 2012; Sleep et al., 2019).

[4] Mach-I was the first set of items used for scale development; Mach-II was an edited version; and Mach-III was the penultimate scale used before analyses were completed. A Mach-V scale was also created as a successor to the Mach-IV. It was intended to be more robust against socially desirable responding. Perhaps because of its length—it includes three times as many statements as the Mach-IV—and its relatively complex coding procedure, the Mach-V never garnered the same popularity as the Mach-IV.

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