



The Dark Triad of Personality: A 10 Year Review

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Abstract

Ten years ago Paulhus and Williams (2002) called attention to the ‘Dark Triad’, a constellation of three conceptually distinct but empirically overlapping personality variables. The three members – Machiavellianism, narcissism and subclinical psychopathy – often show differential correlates but share a common core of callous–manipulation. There are now dozens of studies on the triad and, according to Google Scholar, over 350 citations. The goal of this review is to update and critically evaluate this rapidly expanding literature. The standard measures of each Dark Triad member are reviewed along with newer combination measures. The Dark Triad members are located in in mainstream structural models, namely, the interpersonal circumplex as well as Five- and Six-Factor Models. Key issues and controversies are addressed.

Introduction

How many kinds of bad characters are there? According to Paulhus and Williams (2002), the answer was three – namely, the so-called ‘Dark Triad’ of Machiavellianism, narcissism, and psychopathy. This review covers the intervening 10 years of research into those three socially-aversive personalities. Although citations to that original article are now approaching 400, no review is currently available. We cannot address all that literature in detail, but chose to focus on several key issues. In addition, we provide links to summaries of the larger literature.

In the original paper, Paulhus and Williams (2002) sought to clarify the literature on personalities that are aversive but still within the normal range of functioning: Three variables were most prominent: Machiavellianism, narcissism, and psychopathy. Indeed, all three had enormous literatures. Further examination indicated that each literature suffered from ‘construct creep’, that is, the tendency for researchers focused on a single construct to continually expand its scope (Jones & Paulhus, 2011a). Confusion among the Dark Triad members was almost inevitable, given that, at the subclinical level of functioning, the three concepts share a conceptual resemblance and their common measures overlap empirically.

To tease apart the triad members, Paulhus and Williams (2002) initiated a program of research to evaluate the degree of distinctiveness of the Dark Triad, both conceptually and empirically. That initial work has stimulated many others to conduct their own research, as is evident in the wealth of studies cited below.

Our review is organized around key theoretical and psychometric issues. First is the distinction between clinical and subclinical conceptions. Second is the conceptual and empirical coherence of the triad as well as evidence for the psychological processes that explain their distinctiveness. Third is the biological basis for the triad. Finally, we review the measurement instruments most popular in this research as well as their correlates. In psychometric terms, we are reviewing evidence for the construct validity of the three Dark Triad variables.

To permit comparisons, all the research reported here included at least two of the triad members. Note that the review will not cover results from measures explicitly designed for clinical samples (e.g., the Millon Inventory, PAI, DAPP, or the SNAP). Those measures do not always map onto their subclinical counterparts (Furnham & Crump, 2005).

From Clinical to Subclinical: The Grand Migration

Drawing the line between ‘normal’ and ‘abnormal’ personality has always been a challenging issue (Allport, 1937). In the personality disorder literature, the terms *clinical* and *subclinical* are often contrasted (Lebreton, Binning, & Adorno, 2006). We will apply that terminology in the following way: *Clinical samples* comprise individuals those currently under clinical or forensic supervision; *Subclinical samples* refer to continuous distributions in broader community samples. Although the term implies a milder version, subclinical samples will inevitably cover a wider range and naturally include the extreme cases who are currently at large in the community (Ray & Ray, 1982).

The concepts of narcissism and psychopathy originated in clinical literature and practice (see Furnham & Crump, 2005). Indeed, both remain as personality disorders in the *DSM-IV-TR*. Psychiatric classification, however, has traditionally been categorical: For example, offenders have often been categorized as psychopaths if and only if they exceeded 30 on Hare’s (1991) Psychopathy Check List. By contrast, mainstream personality assessment has relied on dimensional models such as the Big Five and used trait questionnaires as the primary means of assessment. Within the latter tradition, pathological traits are viewed as extremes of “normality” (Wiggins & Pincus, 1989). Consistent with this notion, psychopathy has often been seen as synonymous with extremely low scores on agreeableness and conscientiousness (Eysenck & Eysenck, 1985; Miller, Lynam, Widiger, & Leukefeld, 2001).

Narcissism migrated into the mainstream literature with the publication of the Narcissistic Personality Inventory (NPI; Raskin & Hall, 1979). This migration was surprisingly smooth because the subclinical version was largely consistent with the clinical definition (Campbell & Foster, 2007; Morf & Rhodewalt, 2001). The first principal component of the NPI was characterized by grandiosity, entitlement, dominance and superiority (Corry, Merritt, Mrug, & Pamp, 2008). A notable exception to the parallel literatures has been the inability of the NPI to capture the vulnerable aspects of clinical narcissism (Cain, Pincus, & Ansell, 2008; Miller et al., 2010). Whether clinical or subclinical, others find narcissists to be socially aversive (Leary, Bednarski, Hammon, & Duncan, 1997; Paulhus, 1998).

The migration of psychopathy into the mainstream personality research was anticipated by Ray and Ray (1982): However, the only questionnaire available at the time was the dubious MMPI PD scale. The subsequent introduction of a number of construct-based questionnaires culminated in reviews by Hall and Benning (2006) as well as Lebreton et al. (2006). Even at the subclinical level, psychopathy is viewed as the most malevolent of the Dark Triad (Rauthmann, 2012). The syndrome is marked by high levels of impulsivity and thrill-seeking along with low levels of empathy (Hare, 1985; Lilienfeld & Andrews, 1996).

By contrast, the construct of Machiavellianism had an entirely different etiology. Rather than a clinical syndrome (i.e., a personality disorder), the concept was named eponymously for the philosophy of Nicolo Machiavelli, a political advisor to the Medici family in the 1500s. Christie and Geis (1970) created a questionnaire measure by distilling the philosophy and tactical recommendations from Machiavelli’s original text. Subsequent experimental and correlational work led to the conclusion that everyday samples who

agreed with such statements also behaved that way in their personal lives. Consistent with Machiavelli, high scorers on the questionnaire are cynical, unprincipled, believe in interpersonal manipulation as the key for life success, and behave accordingly (for the latest review, see Jones & Paulhus, 2009).

Measurement Issues

To date, most Dark Triad research has used standard personality questionnaires whose validity has been well documented in the earlier personality literature. Newer, briefer measures are now available, although, to date, they have received less validation (Paulhus & Jones, forthcoming).

Narcissism

One measure of subclinical narcissism has dominated the Dark Triad literature: The original 40-item NPI (Raskin & Hall, 1979) and its shorter form (NPI-16; Ames, Rose, & Anderson, 2006). More recently, a measure of pathological narcissism has been created and validated by Pincus et al. (Cain et al., 2008; Pincus et al., 2009). However, the grandiosity conception, as tapped by the NPI, is most relevant to Dark Triad research.

Psychopathy

In the Dark Triad literature, the most commonly-used measure of psychopathy is the Self-Report Psychopathy (SRP-III) scale. It was modeled after the Psychopathy Check List (Hare, 1991), the “gold standard” for the measurement of forensic psychopathy. The SRP has gone through several revisions: SRP-I (Hare, 1985), SRP-II (Hare, Harpur, & Hemphill, 1989), the Self-Report Psychopathy Scale-III-E (Williams, Paulhus, & Hare, 2007), and SRP-III (Paulhus, Neumann, & Hare, forthcoming). The 4-factor structure was carved out in Version III and recently confirmed by Neal and Sellbom (2012).

A spate of studies have confirmed the construct validity of the SRP for the assessment of psychopathy in sub-clinical samples. (e.g., Forth, Brown, Hart, & Hare, 1996; Mahmut, Menictas, Stevenson, & Homewood, 2011; Paulhus et al., forthcoming; Williams, Nathanson, & Paulhus, 2010). Its psychometric foundation is the latent trait running through all four subscales: Thus the total score is a meaningful measure of psychopathy.

Other instruments used in Dark Triad research include more than one independent factor. One is the Psychopathic Personality Inventory (PPI; Lilienfeld & Andrews, 1996). Of its two primary factors, the Self-Centered Impulsivity subscale is most relevant to Dark Triad research; the other factor, Fearless Dominance, has primarily adaptive correlates (Miller & Lynam, 2012). Second is the Levenson Self-Report Psychopathy Scale (LSRP; Levenson, Kiehl, & Fitzpatrick, 1995). A comparative review found that total scores on the SRP and PPI firmly converge whereas the LSRP has more in common with measures of antisocial personality disorder (Hicklin & Widiger, 2005).

Machiavellianism

The most common measure of Machiavellianism in the Dark Triad literature is the Mach IV (Christie & Geis, 1970). The German translation has also seen significant use (Henning & Six, 2008). A tentative Mach VI was introduced by Jones and Paulhus (2009) and incorporated in the Short Dark Triad (SD3). Recent attempts have been made

to expand the original conception with multi-dimensional (Rauthmann & Will, 2011) and workplace-specific versions (Kessler et al., 2010).

Measures of all three constructs

Two brief measures are now dominating Dark Triad research. One is the *Dirty Dozen* (Jonason & Webster, 2010). Emphasizing brevity, the Dirty Dozen includes only four items to tap each triad member. Jonason and colleagues have carried out a series of studies to support its validity (e.g., Jonason & Kavanagh, 2010). Although some researchers have found it to be useful (e.g., Rauthmann, 2012), others have been critical (e.g., Lee et al., forthcoming; Miller & Lynam, 2012; Paulhus & Jones, forthcoming; Rauthmann, forthcoming).

The other popular measure is the *Short Dark Triad* (SD3; Jones & Paulhus, forthcoming). This 27-item instrument has been employed successfully by a number of researchers (e.g., Arvan, 2012; Baughman, Dearing, Giammarco, & Vernon, 2012; Giammarco, Atkinson, Baughman, Veselka, & Vernon, forthcoming; Holzman, 2011; Lee et al., forthcoming). In the initial paper, the SD3 authors presented five studies, including informant validation of all three subscales. Direct comparisons with the Dirty Dozen indicate broader predictive power for the SD3 (Egan, 2012; Jones & Paulhus, forthcoming; Lee et al., forthcoming).

Two other measures have yet to be used in published research. One is the *Dark Triad Screening Measure* (MacNeil, Whaley, & Holden, 2007). That instrument was designed to provide subscales with minimal overlap. Their confirmatory factor analysis successfully replicated a 3-factor structure. The other unpublished instrument is the *Mini-Markers of Evil* (Harms, Roberts, & Kuncel, 2004). This 57-item instrument is constructed entirely of trait adjectives. Its three subscales show concurrent validity with the standard measures of the Dark Triad.

Empirical overlap

Recall that the original impetus for the simultaneous study of the Dark Triad members was the apparent discrepancy between their distinctive theoretical origins and empirical findings that suggested overlap. Because of some common features and positive intercorrelations, some authors have viewed them as indistinguishable in normal samples (e.g., McHoskey, Worzel, & Szyarto, 1998). As a result, researchers have sometimes gone so far as to combine them into a global Dark Triad index (e.g., Jonason, Li, & Teicher, 2010).

Evidence for the empirical overlap derives from two types of data. First is a number of factor analytic studies where subclinical psychopathy and narcissism load on the same factor (Furnham & Crump, 2005; Furnham & Trickey, 2011; Hogan & Hogan, 1997). Second, a number of studies show similar patterns when psychopathy and narcissism are correlated with self-reports, observer-reports and behavioral measures (Khoo & Burch, 2008; McHoskey et al., 1998; Moscoso & Salgado, 2004). In the one factor analytic study using the standard Dark Triad measures, all three loaded on the HEXACO Honesty-Humility factor (Lee & Ashton, 2005).

How strong are the intercorrelations in normal samples? A meta-analysis of nearly 100 correlations is available from the senior author. Although the instrument used to operationalize each Dark Triad member varies across studies (in some studies subscale scores are used instead of the full measure), several conclusions can be drawn. First, all the

correlations are positive and significant. Second, nearly a quarter are $>.50$. Third, the highest mean correlations appear between psychopathy and Machiavellianism, and the lowest between narcissism and Machiavellianism. A key question is the extent to which these correlations are a function of the psychometric properties of the measures, item overlap, common components, dissimulation or some other factor.

The moderate size but consistent direction of these intercorrelations bears on the question of how to treat the Dark Triad members in research situations: Should they be combined into a composite or evaluated separately as distinct predictors?

The lion's share of research in this review suggests that any apparent equivalence of the Dark Triad members is illusory. Because they are positively correlated, the three members often show similar correlates. The key to differentiating the Dark Triad lies in administering measures of all three to the same sample and applying multiple regression to determine their independent contributions. Only then do the theoretically predicted differences emerge clearly (Paulhus & Williams, 2002).

When regression analyses are conducted, differences among the Dark Triad outcomes become clear. Here are some examples. Compared to the other two, Machiavellians are more likely to plagiarize essays (Nathanson, Paulhus, & Williams, 2006a) and avoid risky bets (Jones & Paulhus, forthcoming). More than the other two, narcissists self-enhance (Paulhus & Williams, 2002) and aggress after ego threat (Jones & Paulhus, 2010). Finally, more than the other two, psychopaths bully others (Baughman et al., 2012; Williams, McAndrew, Learn, Harms, & Paulhus, 2001), and carry out their revenge fantasies (DeLongis, Nathanson, & Paulhus, 2011).

Of special import are studies demonstrating that observers can distinguish the Dark Triad members. Ziegler and Lämmle (2012), for example, used structural modeling to demonstrate the ability of close informants to discriminate the three members (see also Paulhus & Jones, 2012). Other studies confirming distinct correlates of the Dark Triad are presented in the later section on Major Outcomes.

Location in Personality Space

Given their relevance to normal personality, the Dark Triad should have links to the predominant structural models of personality. The most important of these models are the interpersonal circumplex (e.g., Wiggins, 1979), the Five Factor Model (Costa & McCrae, 1991) also known as the Big Five, and the HEXACO model (Lee & Ashton, 2005), also known as the Big Six.

The interpersonal circumplex

This 2-factor structural model has an influential history anchored conceptually in the work of Bakan (1966) and structurally in the work of Leary (1957). The axes are commonly labeled Agency (striving for autonomy and superiority) and Communion (connecting with and helping others). All the intermediary locations were assigned labels by Wiggins (1979).

The most thorough analysis of the Dark Triad geometry was provided by Jones and Paulhus (2011a). They showed that all three members shared Quadrant II, that is, high agency and low communion (see also Paulhus & Abild, 2011). Jones and Paulhus went further to argue that, because of their similar locations, distinguishing the three required the consideration of two other dimensions: Psychopathy stands apart by scoring high on a dimension of impulsivity; Narcissism stands apart on an axis of superior identity (i.e.,

self-enhancement). Rauthmann (forthcoming) replicated the circumplex location but showed that residualized versions of the Dark Triad scattered to different quadrants.

The Five Factor Model

The five factor model (also known as the Big Five) covers the five broad (and relatively independent) personality dimensions: Extraversion, Agreeableness, Conscientiousness, Neuroticism, Openness to Experience (Costa & McCrae, 1991). All of the Big Five have been linked to one or more of the Dark Triad variables.

Most consistent are negative associations with Agreeableness and Conscientiousness (Jakobwitz & Egan, 2006; Jonason, Koenig, & Tost, 2010; Jonason, Li, & Buss, 2010; Jonason, Li, & Teicher 2010; Jonason & Webster, 2010; Miller et al., 2010; Nathanson, Paulhus, & Williams, 2006b; Nathanson et al., 2006a; Paulhus & Williams, 2002; Williams et al., 2010).

Negative links with Agreeableness are entirely understandable. As measured by the NEO-PI (Costa & McCrae, 1991), the concept is exceedingly broad, including (reverse-keyed) attributes such as shrewd, autocratic, selfish; stubborn, demanding, headstrong, impatient, intolerant, outspoken, hard-hearted, argumentative, and aggressive. Because they share those elements, it is no surprise that the standard 48-item NEO-PI measure correlates with Dark Triad measures. Associations are similar but smaller when shorter Big Five measures are used (Paulhus & Williams, 2002).

Distinctions among the Dark Triad emerge when the Big Five facets are separated. For narcissism, the strongest associations are with low Modesty and low Straightforwardness whereas psychopathy associations are strongest with low Deliberation and low Dutifulness (Miller et al., 2010). Distinctions also emerge with the facets of Conscientiousness: the strongest correlates of narcissism are achievement-striving and competence whereas the strongest correlates of psychopathy are low dutifulness and low deliberation (Miller et al., 2010).

The Big Six

Michael Ashton, Kibeom Lee and colleagues have argued for a six factor structure called the HEXACO model (Ashton & Lee, 2001; Lee & Ashton, 2005): The additional dimension was labeled Honesty-Humility. Because it explicitly contrasts pro-social and anti-social behavior, this factor is more relevant to the Dark Triad than are any of the Big Five dimensions. Empirical results have been rather straightforward: All three of the triad load on that sixth factor (Lee & Ashton, 2005; Lee et al., forthcoming). Later research clarified even further how the Dark Triad link up with the Five Factor and Circumplex configurations (Veselka, Schermer, Martin, & Vernon, 2010; Veselka, Schermer, & Vernon, 2011).

The core of the Triad

If the Dark Triad members are not interchangeable, then why are they always positively correlated – regardless of the instrument used to measure them? One possibility is a common underlying element (Paulhus & Williams, 2002). Among the strongest candidates are disagreeableness, honesty-humility, lack of empathy (callousness), and interpersonal antagonism.

Vince Egan has made a strong case for agreeableness (Egan & McCorkindale, 2007; Jakobwitz & Egan, 2006). As noted above, a range of studies support the link. Our

concern is that the wide breath of agreeableness allows it to correlate with a wide range of lower order traits – not necessarily for the same reasons. Donald Lynam has argued that interpersonal antagonism is a better explanation (e.g., Lynam & Derefinko, 2005). Michael Ashton and Kibeom Lee argue for Honesty-Humility as the common element (Ashton & Lee, 2001; Lee & Ashton, 2005). For Jonason, Li, Webster, and Schmitt (2009), it is social exploitativeness. Finally, Jones and Paulhus make the case for callousness (low empathy) as the common core (Jones & Paulhus, 2011a). Whatever the causal order, it appears that callousness goes hand-in-hand with interpersonal manipulation and exploitation (Jones & Figueredo, forthcoming; Miller et al., 2010). More research is needed to determine whether this difference in labeling is substantive or merely semantic.

Biological and Environmental Origins

Nature or nurture? When Paulhus and Williams (2002) isolated the Dark Triad as a distinct constellation, they made no assumptions about their etiology. Since then, a number of theoretical and empirical advances have been made. On the theoretical side, the classic roots have been revisited and possible evolutionary roots have been postulated. On the empirical side, a series of behavior-genetic studies have partitioned the nature and nurture foundations of the Dark Triad. Finally, the callous core has been identified (Ali, Amorim, & Chamorro-Premuzic, 2009; Douglas, Bore, & Munro, 2012; Frick, Bodin, & Barry, 2000; Jones & Paulhus, 2011a).

Behavior genetics: Nature or nurture?

Distinctive behavior behaviors among the Dark Triad are already evident in juveniles aged 11–17 (Lau & Marsee, 2012). Vernon and colleagues showed that all three have substantial genetic components (Petrides, Vernon, Schermer, & Veselka, 2011; Vernon, Villani, Vickers, & Harris, 2008; Veselka et al., 2011). Machiavellianism alone has a shared environmental component (Vernon, Martin, Schermer, & Mackie, 2008; Vernon, Villani, et al., 2008). That finding was interpreted by Jones and Paulhus (2011a) as evidence that Machiavellianism is the most likely of the three to be modified by experience. To fully substantiate claims about the modifiability of each triad member, the ideal study would examine how the environmental components changed across the life span.

Evolutionary theory

The notion that dark personalities can flourish as social parasites has been around since Linda Mealey (1995). She pointed out that evolutionary theory predicts such predatory subgroups. Two groups have taken the lead in elaborating an evolutionary take on the Dark Triad. One group is led by Peter Jonason (e.g., Jonason, Valentine, Li, & Harbeson, forthcoming; Jonason et al., 2009); the other group is led by A. J. Figueredo (e.g., Brumbach, Figueredo, & Ellis, 2009; Figueredo et al., 2009; Gladden, Figueredo, & Jacobs, 2009; Sisco, Gladden, & Figueredo, 2010). Understandably, these evolutionary approaches emphasize mating issues.

To explain individual differences in Dark Triad traits, both groups apply the notion of life history strategy (Figueredo, 2007; Rushton, 1985). Within that framework, individuals differ along a continuum of reproductive strategies. Those emphasizing mating are said to have a fast life strategy; those emphasizing parenting are said to have a slow reproductive strategy.

Both groups argue that individuals with Dark Triad traits have a fast life history strategy. Characterized by deficits in self-control, such individuals often exhibit short-term mating, selfishness, and other antisocial manifestations. The relatively “lighter” traits, Machiavellianism and narcissism, include facets that lessen the socially undesirable and costly aspects of having a fast life strategy. Hence the latter two can easily function in society whereas the psychopath has more difficulty. The evidence supporting these claims is reviewed in the section below under Major Outcomes.

Given our focus on differentiation, we would argue that a more nuanced version of evolutionary psychology is required to explain the Dark Triad. Following Mealey (1995), there is room for more than one ‘dark niche’ in human societies – at least three, we suggest. Thus each Dark Triad member exploits others in a unique social environment wherein their brand of callous exploitation fosters reproductive success.

Major Outcome Domains

A wide variety of outcome variables have been described in the above research. Here they are organized around five human concerns: occupational, educational, mating, interpersonal, and antisocial behavior. Within these themes, a few topics have been given special attention. Details on many of these studies are available from the senior author.

Workplace behavior

One or more of the Dark Triad personalities invariably emerge in analyses of counter-productive behavior (Harms, Spain, & Hannah, 2011; Hogan, 2007). They are evident in notions of ‘toxic leadership’, ‘snakes in suits’, and ‘bad bosses’. Such leaders typically derail somewhere down the line (Babiak, 1995; Dotlich & Cairo, 2003; Furnham, 2010; Hogan & Hogan, 2001; Kets de Vries, 2006; Lubit, 2004). A review of the Dark Triad at work indicates a similar fate for non-leaders as well (O’Boyle, Forsyth, Banks, & McDaniel, 2012).

Recent research has turned to the adaptive side by uncovering contexts where one or more of the Dark Triad have proved to be advantageous (Hogan & Hogan, 2001). Furnham (2010), for example, has detailed cases where high levels of Dark Triad traits, when combined with other factors (intelligence, physical attractiveness), often help an individual acquire positions of leadership. In the words of Hogan (2007), dark traits help people “get ahead of” but not necessarily “get along with” others in the work place.

In fact, some researchers have now focused on so-called “successful” psychopaths¹ (Babiak & Hare, 2006; Chatterjee & Hambrick, 2007) as well as successful narcissists (Chatterjee & Hambrick, 2007; Paulhus, Westlake, Calvez, & Harms, forthcoming). Although these individuals may flourish in some contexts, most eventually fall from grace (Furnham, 2010; Hogan, 2007).

Distinctive workplace behaviors were recently simulated by asking student samples to predict how they would react to a variety of scenarios (Jonason, Slomski, & Partyka, 2012). Whereas narcissists claim to use soft manipulation tactics, psychopaths chose hard tactics. As usual, Machs are the most flexible: They chose both soft and hard tactics.

Educational behavior

Although the assumed goal of education is knowledge transfer, its secondary function is to evaluate and distinguish individuals with regard to their potential. Because students are

well aware of the second function, those with darker personalities continually face the temptation to cut corners.

The most obvious examples are cheating and essay plagiarism. Whereas psychopathy is the the only independent predictor of exam copying (Nathanson et al., 2006a), essay plagiarism is also predicted by Machiavellianism (Williams et al., 2010). This pattern is understandable, given that classroom cheating is often spur-of-the-moment whereas plagiarism often requires planning and self-control.

Students offered extra credit for participation in research also have opportunities to take advantage of loopholes in the system. Not surprisingly, psychopaths and Machiavellians were found to claim extra credits they had not earned (Paulhus & Jones, 2012).

Mating behavior

One of the most consistent findings in Dark Triad research is the higher scores received by males – regardless of the measurement instruments (e.g., Furnham & Trickey, 2011; Jonason, Koenig, et al., 2010; Paulhus & Williams, 2002). This sex difference often turns out to moderate the pattern of findings on interpersonal relations (Jones, 2012).

As noted above, much of the work by Jonason et al. has taken an evolutionary perspective. Thus Jonason et al. (2009) argued that the sex difference in Dark Triad scores helps explain the fact that men are more likely than women to pursue a short-term impulsive mating strategy (in line with the oft-cited biological restraints borne by women). These claims were largely supported. They also predicted that all three triad members would be more inclined to engage in a short-term mating strategy. Later data analyzed with regression analyses failed to support this claim: Only psychopaths showed a clearly impulsive mating style (Jones & Paulhus, 2011b).

Jonason, Li, and Buss (2010) found that dark individuals, especially psychopaths, poached mates from others and were themselves poached from their mates at higher rates than those scoring lower on triad traits. This behavior provides one path to reproductive success and ensures that the short-term mating style remains evident in the gene pool (Mealey, 1995).

Jonason and Kavanagh (2010) provided a more detailed examination of mating styles by differentiating sexual, manipulative, practical, enduring, selfless, and love-struck individuals. After multiple regression was applied, the manipulative style was localized to psychopathy and the love-struck style to Machiavellianism. The practical love style was positively associated with Machiavellianism and narcissism but negatively with psychopathy. The selfless style was positively associated with Machiavellianism but negatively with psychopathy. In short, it appears that Machiavellians show the most flexibility in their mating styles.

Together, this research indicates that each Dark Triad member approaches reproduction in a distinct fashion. A key distinction centers on the preference for short-term vs. long term-perspectives: Whereas psychopaths increase their mating possibilities with an impulsive, aggressive mating strategy, Machiavellians benefit from a more strategic and regulated mating style that maintains the relationship.

Interpersonal behavior

All three of the Dark Triad admit prejudice against immigrants and, more generally, proclaim a social dominance orientation (Hodson, Hogg, & MacInnis, 2009). All three are rated high in ruthless self-advancement (Zuroff, Fournier, Patall, & Leybman, 2010).

In general, however, evaluations by knowledgeable observers reveal distinctive interpersonal styles for the Dark Triad members. Psychopaths are the most likely to acquire tattoos for intimidation purposes (Nathanson et al., 2006b), and make negative impressions in brief meetings (Rauthmann, 2012).

Consistent with Christie and Geis (1970), Machiavellians harbor the most cynicism toward others (Rauthmann, 2012). Along with psychopaths, Machiavellians are also the most morally suspect (Arvan, 2012; Glenn, Iyer, Graham, Koleva, & Haidt, 2009) and, more generally, have the 'darkest' personalities (Rauthmann & Kolar, 2012). The fact that the Dark Triad members can be distinguished by facial characteristics suggests a prepared danger cue (Gordon & Platek, 2009; Holzman, 2011; Holzman & Strube, forthcoming).

Although often perceived by others as socially aversive, narcissists see themselves as good leaders (Furtner, Rauthmann, & Sachse, 2011; Zuroff et al., 2010) and high in emotional intelligence (Petrides et al., 2011). All three of the Dark Triad tend to use humor as an interpersonal strategy (Veselka et al., 2011). A closer look indicates that Machiavellians and psychopaths prefer aggressive humor styles whereas narcissists prefer affiliative humor (Martin, Lastuk, Jeffrey, Vernon, & Veselka, 2012; Veselka et al., 2010).

Antisocial behavior

In direct comparisons, it seems clear that psychopaths are more likely than Machiavellians and narcissists to have confronted the justice system (Williams et al., 2001). Indeed, the investigation of psychopathy began with studies of repeat criminals (Cleckley, 1941). Hence, it is not surprising that psychopaths are known as bullies (Baughman et al., 2012; Williams et al., 2001), aggress after physical threat (Jones & Paulhus, 2011a), and actually carry out their deviant fantasies, whether they be sexual (Williams, Cooper, Howell, Yuille, & Paulhus, 2009) or revenge fantasies (DeLongis et al., 2011).

Whereas psychopaths respond aggressively to physical threat, narcissists require significant ego-threat (Jones & Paulhus, 2010). Although as malevolent as psychopaths, Machiavellians are more cautious and deliberate in their behavior: Hence, they do not act on temptation like psychopaths (Williams et al., 2010). When ego-depleted, however, Machiavellians act out like psychopaths (Paulhus & Jones, forthcoming).

The emerging study of corporate crime provides a provocative example of where the Dark Triad members diverge (Mathieu, Hare, Jones, Neumann, & Babiak, forthcoming; Jones, Mathieu, Neumann, Babiak, & Hare, forthcoming). Clearly, such white-collar criminals as Bernie Madoff, who enjoyed 50 years of financial and interpersonal success, are not hampered by the impulsivity of a psychopath. It is the corporate Machiavellian who successfully perpetrates white collar crime (Jones et al., 2012). Given world enough and time, however, even Machiavellians are likely to be caught.

Conclusions and Future Research

Ten years ago, Paulhus and Williams (2002) chose the adjective 'dark' to describe the trio of personalities addressed in this review. At the time, the label seemed appropriate because each Dark Triad member had drawn attention for its socially aversive nature (see also Hogan & Hogan, 1997).² Nonetheless, each member appears to have both adaptive and maladaptive elements. This tradeoff emerged in all of the outcome domains reviewed above. Even psychopathy appears to pay off as a short-term mating style (Jonason et al.,

forthcoming; Jones, 2012). Such findings are consistent with evolutionary arguments that both poles of personality traits have adaptive elements (Penke, Denissen, & Miller, 2007).

Lumping vs. splitting

The research reviewed here suggests that each Dark Triad member has a rich, distinctive complexion. Lumping them together implies a simplistic distinction between good and bad personalities. We suspect that the temptation to lump them stems from a number of factors.³ First is the overlap (both conceptual and empirical) resulting from their common callousness. The moderate-sized positive intercorrelations among standard measures of the triad have persuaded some commentators to assume a single concept. These commentators may have been misled by the fact that, because of their empirical overlap, the Dark Triad members sometimes show the same outcome correlates. A second reason for lumping is the ‘construct creep’ noted in the introduction: Each literature has grown to include hundreds of published studies and the tendency in each field has been to gradually colonize more and more of the dark personality space.

Unfortunately, this tendency toward construct creep continues unabated. In our opinion, some psychopathy measures are too broad. One example is the Psychopathic Personality Inventory published by Lilienfeld and Andrews (1996). Comprising 180 items and eight facets, the inventory was purposely designed to be as inclusive as possible. Our analysis suggests that it went too far by including items measuring Machiavellianism, narcissism, and psychological adjustment (see Miller & Lynam, 2012).

The same is true of two recent inventories developed to broaden the scope of Machiavellianism: One was developed by Kessler et al. (2010) and the other by Rauthmann and Will (2011). The former suggests separate scoring of three factors and the latter requires five. By contrast, the unidimensional Mach VI measure (Jones & Paulhus, 2009) retained its fidelity to the original elements cited by Machiavelli himself.

Analytic issues

To distinguish the Dark Triad, one cannot rely on raw correlations as the sole method of analysis. At a minimum, multiple regression or partial correlations should be reported. This is not to say that the Dark Triad members rarely engage in similar behaviors. They often do – presumably because of the common core they share.

Compromise approaches that consider both the common core and the unique member⁴ qualities have been explored by a number of researchers (Giammarco et al., forthcoming; Jones & Figueredo, forthcoming; Lee et al., forthcoming; Sisco et al., 2010). The first unrotated principal component can be extracted and used for prediction, then followed up with multiple regression on the three separate predictors. Hierarchical models have also been suggested (Ashton & Lee, 2001; Jonason, Kavanagh, Webster, & Fitzgerald, 2011; Sisco et al., 2010).

Future analyses should consider other important differentiations within each Dark Triad member. Narcissism, for example, been separated into grandiose and vulnerable facets (Ackerman et al., 2011; Pincus et al., 2009). Primary and secondary forms of psychopathy have been distinguished (Levenson et al., 1995). Because vulnerable narcissism and secondary psychopathy are the less confident variants, they are less relevant to Dark Triad research. Matthias Ziegler and Lena Lämmle have already shown the value of analyzing facets rather than global scores for each trait (Ziegler & Lämmle, 2012). Nonetheless, more attention is required to which facets are key to the Dark Triad and which ones are not.

Beyond the triad

Whereas some researchers lean to the ‘lumping’ side, others have called for further additions to our taxonomy of dark characters. Sadism, for example, has already been included under the rubric of the *Dark Tetrad* (Chabrol, Leeuwen, Rodgers, & Sejourne, 2009; Paulhus & Buckels, 2011). Other possibilities are borderline disorder and status-driven risk-taking (Visser, Pozzebon, & Tamayo, 2012).

Of course, the dark roster should be circumscribed in some fashion and not be indiscriminant. Tentatively our rationale is that callousness be the necessary condition. Currently this criterion is satisfied by the Dark Triad and sadism.

Other correlates of interest

Inevitably, research on the Dark Triad share must address the possibility of some sort of moral deficit (e.g., Arvan, 2012; Bartels & Pizarro, 2011; Campbell et al., 2009). Further work is necessary to discriminate the Dark Triad from such variables as social dominance orientation, aggression sensitivity (Lawrence, 2006), and sensational interests (Egan et al., 2005).

Empirically, the challenge is to determine the explanatory power of Dark Triad variables over and above these other unsavory tendencies. Developmentally, it can be argued that personality variables such as the Dark Triad traits are sequentially prior to those alternatives. One reason is the evidence for a strong genetic component of each triad member (Vernon, Martin, et al., 2008; Vernon, Villani, et al., 2008). In cases where other predictors also have a genetic component, it may be more difficult to tease apart the numerous sources of interpersonally toxic behavior (Frick et al., 2000). We anticipate that these other contenders will ultimately be distinguished from the Dark Triad by level of analysis: For example, traits vs. values, identities, attachment styles, etc.

Wrap-up

Although we have emphasized their distinctiveness, we freely acknowledge that some individuals possess more than one of the Dark Triad traits. Indeed, their positive intercorrelation suggests that a subgroup with all three traits lurks within any large community. Successful dictators such as Gadhafi and Saddam – eccentric but not psychotic – are likely candidates. Others include diabolical terrorists such as Osama Bin Laden and Anders Breivik. Their psychopathy provoked extreme brutality and their Machiavellianism facilitated strategic manipulation (Paulhus & Buckels, 2011). Finally, their narcissistic sense of superiority and entitlement readily justified the behavior. At the more mundane but no less important level, such monstrous characters often surface in cases of spousal abuse (Dutton & Kropp, 2000). We are exploring those important applications in ongoing research.

Short Biographies

Del Paulhus’s research is centered in normal personality but cuts across social psychology, forensic psychology, and clinical psychology. He is best known for his work on self-presentation, including socially desirable responding, impression management, self-deception and over-claiming. He has taught at the University of British Columbia for thirty years with one year visiting positions UC Berkeley and UC Davis.

Adrian Furnham was educated at the London School of Economics where he obtained a distinction in an MSc Econ., and at Oxford University where he completed a doctorate (D.Phil) in 1981. He has subsequently earned a D.Sc (1991) and D.Litt (1995) degree. Previously a lecturer in Psychology at Pembroke College, Oxford, he has been Professor of Psychology at University College London since 1992. He has lectured widely abroad and held scholarships and visiting professorships at, amongst others, the University of New South Wales, the University of the West Indies, the University of Hong Kong and the University of KwaZulu-Natal. He has also been a Visiting Professor of Management at Henley Management College. He has recently been made Adjunct Professor of Management at the Norwegian School of Management (2009). He has written over 1000 scientific papers and 70 books. He is on the editorial board of a number of international journals, as well as the past elected President of the *International Society for the Study of Individual Differences*. He is also a founder director of Applied Behavioural Research Associates (ABRA), a psychological consultancy. Like Noel Coward, he believes work is more fun than fun and considers himself to be a well-adjusted workaholic. He rides a bicycle to work (as he has always done) very early in the morning and does not have a mobile phone. Adrian enjoys writing popular articles, travelling to exotic countries, consulting on real-life problems, arguing at dinner parties and going to the theatre. He hopes never to retire.

Steven Richards is an undergraduate student in the School of Behavioral and Brain Sciences at the University of Texas at Dallas. He plans on graduating in May 2013 with a degree in Psychology and Child Learning and Development with minors in Criminology and Healthcare Studies. His research interests include the “dark side” of personality and the environmental and biological influences of healthy development and ageing across the human lifespan. In his spare time, Steven volunteers and/or works for social service agencies and public health initiatives in the Dallas, Texas area.”

Endnotes

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¹ We argue that this successful subgroup is more likely to comprise Machiavellians, the more strategic Dark Triad member.

² Of the three, psychopathy is commonly viewed the darkest (Rauthmann, 2012).

³ Note that Ashton, Lee, and colleagues have been careful not to brand the Dark Triad as a single construct (e.g., Lee & Ashton, 2005). Despite linking all three of the Dark Triad to their Honesty-Humility factor, this research team has recommended against combining them (Lee et al., forthcoming).

⁴ Concerns have been raised about reifying residualized versions of personality scales (Lynam et al., 2006). In the present case, the unique contributions of each Dark Triad member may not fairly represent the original concept.

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