

This item is the archived peer-reviewed author-version of:

Shedding light on the dark side : associations between the dark triad and the DSM-5 maladaptive trait model

Reference:

Grigoras Mihaela, Wille Bart.- Shedding light on the dark side : associations between the dark triad and the DSM-5 maladaptive trait model

Personality and individual differences - ISSN 0191-8869 - 104(2017), p. 516-521

Full text (Publisher's DOI): <https://doi.org/10.1016/j.paid.2016.09.016>

To cite this reference: <https://hdl.handle.net/10067/1361180151162165141>

Shedding light on the dark side: Associations between the dark triad and the DSM-5 maladaptive
trait model

Mihaela Grigoras^a and Bart Wille^{b,c}

^aUniversity of Bucharest

^bGhent University

^cUniversity of Antwerp

Author note: Both authors contributed equally to this paper.

Address correspondence to: Bart Wille; Department of Training and Education Sciences;
University of Antwerp; Belgium. Street address: Sint-Jacobstraat 2-4; 2000 Antwerp. Email:
bart.wille@uantwerpen.be.

Address of co-author: Mihaela Grigoras; Faculty of Psychology and Educational Sciences;
University of Bucharest, Romania. Street address: Șos. Panduri 90, Sector 5, 050663 Bucharest,
Romania. Email: mihaela.nicolescu@drd.unibuc.ro.

Shedding light on the dark side: Associations between the dark triad and the DSM-5 maladaptive trait model

Abstract

The current study investigates the usefulness of the DSM-5 maladaptive trait model to better understand the building blocks of the dark triad personality traits. Specifically, differential associations with 25 maladaptive personality facets are examined to uncover similarities and differences between the dark triad traits (objective 1). In addition, incremental validity of Five-Factor Model (FFM) maladaptive and FFM general personality domains as predictors of the dark triad traits is examined (objective 2). Data were obtained in a sample of Romanian law enforcement personnel (i.e., police officers, gendarmes, fire-fighters; total N = 266). With regard to the first objective, Machiavellianism and psychopathy, more than narcissism, showed multiple associations with facets from the maladaptive trait model. Grandiosity was found to be the only maladaptive facet that connects all three dark traits. Regarding the second objective, results indicated that DSM-5 maladaptive domains outperformed general Big Five domains when they were considered simultaneously as predictors of the dark triad traits, although the predictive effects of Big Five domains did not disappear completely when maladaptive DSM-5 domains were also taken into account. The results expand the understanding of the dark triad and indicate how abnormal traits supplement normal traits when looking at interrelatedness within the triad.

Keywords: narcissism; psychopathy; Machiavellianism; maladaptive personality; DSM-5 trait model; PID-5.

1. Introduction

Since it was launched by Paulhus and Williams in 2002, the dark triad of personality has proven to be relevant to understanding human behavior in different life domains including health and well-being (e.g., Aghababaei & Blachnio, 2015), friendships and romantic life (e.g., Jonason, Lyons, & Blanchard, 2015), work life (e.g., O'Boyle, Forsyth, Banks, & McDaniel, 2012), and education (e.g., Turnipseed & Cohen, 2015). Yet, much still remains to be learned about the exact nature of the three dark triad traits, and in particular about their overlap and distinctiveness in terms of core psychological features. As Jonason and Jackson (2016) recently put it, the dark traits are the “*new kids on the block*” (p. 274) and many questions remain regarding what underlies them.

One approach to disentangle similarities and differences between the dark triad traits has been to relate them to existing and relatively well-understood or ‘mainstream’ (e.g., Furnham, Richards, & Paulhus, 2013) personality taxonomies, such as the Five-Factor Model (FFM) of general personality (e.g., O'Boyle, Forsyth, Banks, Story, & White, 2015) or the HEXACO model (e.g., Lee & Ashton, 2005). Although valuable, these attempts to integrate the dark triad within broader frameworks of personality are still limited in the sense that they have exclusively focused on *general* taxonomies tapping into *normal* personality variation only. This seems problematic, given that at least two of the dark triad traits -i.e. narcissism and psychopathy- are derivatives of clinical syndromes (Furnham et al., 2013; Paulhus & Williams, 2002), and it has been argued that dark traits, particularly Machiavellianism and psychopathy, are indistinguishable within the normal range of personality (McHoskey, Worzel, & Szyarto, 1998; O'Boyle et al., 2015).

Expanding this literature, the current study aims to further our understanding of the dark triad by delving deeper into the personality traits that underlie them. For the first time in the literature, all three dark triad traits are related simultaneously to a comprehensive trait model explicitly designed to tap into abnormal personality functioning. It is examined how this set of maladaptive traits may help to further clarify the similarities and differences between the dark triad traits (i.e., objective 1). Second, the relevance of introducing maladaptive personality in dark triad research is further examined by directly comparing the predictive validities of general and maladaptive personality domains. Specifically, it will also be examined whether and to what extent both personality models have incremental validity in predicting dark triad traits. (i.e., objective 2).

1.1. Associations between dark triad traits and general personality frameworks

All of the Big Five personality domains have been linked to one or more of the dark triad traits (Furnham et al., 2013). Recent meta-analytic work (O'Boyle et al., 2015) has indicated that a negative association with Agreeableness characterizes each of the dark triad traits.

Machiavellianism is additionally negatively associated with Conscientiousness and positively with Neuroticism. Narcissism combines low Agreeableness and Neuroticism with higher scores on Extraversion, Openness and Conscientiousness. Finally, psychopathy tends to combine low Agreeableness and Conscientiousness with elevated scores on Extraversion, Neuroticism and Openness. The overall conclusion was that the Big Five traits were consistently and meaningfully associated with the dark triad, explaining between 30 and 63% of the variance in dark traits. Further, it was noted that the general FFM profiles of Machiavellianism and psychopathy in particular proved remarkably similar, raising concerns about the distinctiveness of these two constructs (O'Boyle et al., 2015).

Research has also related the dark triad to the six-factor HEXACO model of personality (Lee and Ashton, 2005). It was found that all three dark traits were strongly negatively correlated with the Honesty-Humility factor, and that the level of communality between the dark triad traits was explained satisfactorily by the HEXACO variables, but not by the FFM variables. In sum, although there are clear connections between these general personality frameworks and the dark triad model, their usefulness in differentiating between dark triad traits, especially Machiavellianism and psychopathy, is limited.

1.2. Introducing the DSM-5 maladaptive trait model in dark triad research

The current work first investigates the overlap and distinctiveness between the dark triad traits in terms of a broad set of maladaptive personality facets. What connects the dark triad traits conceptually (see Jones & Paulhus, 2014) is that Machiavellianism, narcissism and psychopathy are socially aversive personalities, which means that all three entail a socially malevolent or maladaptive character with behavior tendencies toward self-promotion, callousness or emotional coldness, deceitfulness, and aggressiveness. Additionally, Machiavellianism is supposed to be characterized by manipulateness and a strategic-calculating orientation, whereas defining features of psychopathy are assumed to be impulsive recklessness and thrill seeking. Finally, the proposed hallmark characteristics associated with narcissism are grandiosity, self-promotion and attention seeking (Jones & Paulhus, 2014).

Krueger, Derringer, Markon, Watson, & Skodol (2012) have developed an extensive personality model that captures -among others- the maladaptive tendencies that define each of the dark triad traits. This DSM-5 maladaptive trait model is now widely used in clinical psychology research aimed to uncover the traits underlying psychopathology (for a summary of this work, see

Krueger and Markon, 2014). An overview and description of the 25 maladaptive personality facets specified in this model is provided in the Appendix (based on Krueger & Markon, 2014).

Inspection of the DSM-5 maladaptive trait model clarifies the conceptual overlap with the dark triad. For instance, socially aversive traits such as callousness and deceitfulness are assumed to be characteristic for all three dark traits; impulsivity and risk taking define psychopathy; grandiosity and attention seeking define narcissism; and manipulateness is central to the definition of Machiavellianism (Jones & Paulhus, 2014). Previous research has explored how the DSM-5 maladaptive trait model relates to narcissistic personality disorder (Miller, Gentile, Wilson, & Campbell, 2013) and clinical psychopathy (Strickland, Drislane, Lucy, Krueger, & Patrick, 2013). Both these studies demonstrated that the maladaptive trait model indeed accounts for substantial proportions (i.e., multiple R 's larger than .50) of the variance in both clinical syndromes. To the best of our knowledge, no prior research has examined the relationships between Machiavellianism and the maladaptive trait model. The first objective of the current study is to relate this maladaptive trait model to subclinical conceptualizations of all three dark traits simultaneously. Rather than formulating a priori hypotheses, it is investigated on exploratory grounds to what extent DSM-5 maladaptive facets help to delineate the dark triad traits.

1.3. Incremental validity of FFM general and FFM maladaptive domains

Dark triad traits are defined as *subclinical* constructs, which places them in between normal and abnormal domains of personality functioning (Furnham et al., 2013; Paulhus, 2014). To date, this level of abnormality versus normality in dark triad traits has remained largely unaddressed empirically and is, hence, still poorly understood. The current work aims to address

this gap in the literature by relating the dark triad traits to both general (normal) and maladaptive (abnormal) personality domains.

Krueger et al. (2012), followed by others (e.g., De Fruyt et al., 2013), have demonstrated that the 25 maladaptive facets in the DSM-5 model can be hierarchically organized under five personality pathology domains identified as Negative Affectivity, Detachment, Antagonism, Disinhibition and Psychoticism. Moreover, studies investigating the associations between FFM general (or Big Five) traits and DSM-5 maladaptive traits have provided support for the hypothesis that all five domains of the DSM-5 dimensional trait model are extreme and maladaptive variants of general personality structure (i.e., Negative Affectivity as extreme Neuroticism, Detachment as extreme low Extraversion, Antagonism as extreme low Agreeableness, Disinhibition of extreme low Conscientiousness, and Psychoticism as extreme high Openness; De Fruyt et al., 2013; Gore & Widiger, 2013). Hence, there is consensus in the literature that the FFM is a unifying framework for understanding both adaptive (general) and maladaptive personality. The second objective of the present study is to explore the incremental validity of FFM maladaptive domains beyond FFM general domains and vice versa.

2. Method

2.1. Participants and procedure

Data were used from a psychological assistance program provided to the Romanian Ministry of Internal Affairs law enforcement personnel (i.e., police officers, gendarmes, fire-fighters; total N = 266). The main objective of this program is to monitor and enhance employee psychological well-being and, if necessary, strengthen resilience (e.g., through coaching). Importantly, people going through this assistance program are ascertained that their results will not be used for personnel decisions including promotions or special assignments (e.g., to

international missions). Participants were also aware that their anonymized assessment data could be used for research purposes. All self-report instruments were administered to groups of five to ten employees in paper-and-pencil format. The sample was predominantly male (82.5%) and aged between 22 and 54 years old ($M = 38.21$; $SD = 1.75$).

2.2. Measures

2.2.1. Dark Triad

A Romanian version of the Short Dark Triad (SD3; Jones & Paulhus, 2014) was used to assess the dark triad of personality. The SD3 consists of 27 items, nine items for each dark trait, that are scored on a five-point Likert scale (1 = *strongly disagree*; 5 = *strongly agree*). Example items are “It’s not wise to tell your secrets” (Machiavellianism), “People see me as a natural leader” (narcissism), and “Payback needs to be quick and nasty” (psychopathy). The Romanian version of the SD3 has been used in previous research on the role of dark side personality in the work context (Iliescu, Ispas, Sulea, & Ilie, 2015).

2.2.2. FFM general personality

FFM general personality was assessed using the authorized Romanian translation of the NEO-FFI (Costa & McCrae, 1992). The NEO-FFI has 60 items to be scored on a 5-point rating scale (1 = *strongly disagree*; 5 = *strongly agree*), with 12 items for each of the Big Five personality domains. Example items are “Sometimes I feel completely worthless” (Neuroticism), “I like to be where the action is” (Extraversion), “I am intrigued by the patterns I find in art and nature” (Openness), “I would rather cooperate with others than compete with them” (Agreeableness), and “I’m pretty good about pacing myself so as to get things done on time” (Conscientiousness). The Romanian version of the NEO-FFI has been widely used in previous research (e.g., Iliescu et al., 2015; Ispas, Iliescu, Ilie, & Johnson, 2014).

2.2.3. FFM maladaptive personality

FFM maladaptive personality was assessed using a Romanian translation of the Personality Inventory for DSM-5 (PID-5; Krueger et al., 2012). The PID-5 is a 220-item measure of the DSM-5 maladaptive trait model, with items to be scored on a 4-point Likert scale ranging from 0 (*very false or often false*) to 3 (*very true or often true*). The Romanian version of the PID-5 was developed following an iterative process of backward translations. Higher order PID-5 domains are computed by summing the facet scores that contribute primarily to the domain (APA, 2013; see Appendix). Example items are “My emotions sometimes change for no good reason” (Emotional Lability - Negative affect), “I prefer not to get too close to people” (Withdrawal - Detachment), “I’m good at making people do what I want them to do” (Manipulativeness - Antagonism), “Others see me as irresponsible” (Irresponsibility – Disinhibition), and “I have some unusual abilities, like sometimes knowing exactly what someone is thinking” (Unusual Beliefs & Experiences – Psychoticism). It is relevant to note that structural analyses of the Romanian version of the PID-5 yield a five-factor solution that is largely congruent with that of the U.S. derivation sample (Krueger et al, 2012). More information on the adaptation and the structural validity of the Romanian PID-5 is available from the first author upon request.

3. Results

3.1. Correlations between dark triad traits and DSM-5 maladaptive facets

The correlations between dark triad traits and DSM-5 maladaptive facets are summarized in Table 1. Correlations between dark triad traits and FFM general and maladaptive domains are also reported for completeness. To control Type I error, only those correlations with $p < 0.001$ (two-tailed) are considered significant and are further discussed.

1 Table 1

2 *Bivariate correlations between dark triad and DSM-5 maladaptive facets*

Traits	α	Mean	SD	Machiavellianism	Narcissism	Psychopathy
<i>DSM-5 Maladaptive facets</i>						
Emotional Lability	.85	2.16	2.98	.24*	-.01	.32*
Anxiousness	.81	3.43	3.39	.19	-.11	.26*
Restricted Affectivity	.67	3.96	2.99	.33*	-.05	.29*
Separation Insecurity	.68	4.26	3.47	.27*	-.01	.18
Hostility	.80	3.98	3.87	.38*	.13	.38*
Perseveration	.69	4.38	3.24	.26*	.02	.27*
Submissiveness	.69	3.57	2.68	.20	.13	.20
Withdrawal	.84	2.94	3.70	.12	-.16	.21*
Anhedonia	.67	2.42	2.62	.17	-.12	.23*
Depressivity	.79	2.98	3.72	.13	-.07	.21*
Intimacy Avoidance	.70	1.87	2.34	.14	-.11	.19
Suspiciousness	.75	3.57	3.26	.36*	.11	.36*
Manipulativeness	.63	3.25	2.38	.32*	.30*	.20
Deceitfulness	.74	3.61	3.49	.43*	.14	.42*
Grandiosity	.79	4.21	3.57	.33*	.42*	.29*
Attention Seeking	.85	6.23	4.74	.31*	.42*	.16
Callousness	.80	2.89	3.79	.28*	.09	.49*
Irresponsibility	.57	2.01	2.19	.19	-.00	.32*
Impulsivity	.75	2.38	2.67	.17	.09	.40*
Rigid Perfectionism	.82	10.35	5.74	.37*	.09	.19
Distractibility	.80	1.90	2.68	.16	-.06	.31*
Risk Taking	.72	19.02	5.58	.15	.18	.22*
Eccentricity	.91	2.83	4.51	.24*	.07	.39*
Perceptual Dysregulation	.87	1.32	2.80	.13	.01	.29*
Unusual Beliefs & Experiences	.76	2.29	3.03	.34*	.19	.32*
<i>FFM domains (general and maladaptive)</i>						
NEO-Neuroticism	.73	23.35	5.53	.22*	-.14	.36*
<i>PID5 –Negative affect</i>	.88	9.76	8.23	.27*	-.05	.29*
NEO-Extraversion	.72	44.14	5.60	-.06	.35*	-.16
<i>PID5 – Detachment</i>	.89	7.19	7.63	.15	-.16	.24*
NEO-Agreeableness	.74	47.50	5.66	-.39*	-.03	-.45*
<i>PID5 –Antagonism</i>	.86	11.05	7.88	.44*	.34*	.38*
NEO-Conscientiousness	.83	52.22	5.45	-.11	.17	-.31*
<i>PID5 –Disinhibition</i>	.87	6.20	6.43	.19	.01	.39*
NEO-Openness	.61	37.90	4.19	-.04	.11	.03
<i>PID5 –Psychoticism</i>	.93	6.20	8.93	.26*	.11	.38*

3 *Note.* * $p < .001$; two-tailed.

1 Machiavellianism and psychopathy show positive correlations with a range of
2 maladaptive trait facets. Machiavellianism is most strongly correlated with Deceitfulness,
3 followed by Hostility, Rigid Perfectionism, Suspiciousness, Unusual Beliefs & Experiences,
4 Grandiosity, Restricted Affectivity, Manipulativeness, Attention Seeking, Callousness,
5 Separation Insecurity, Perseveration, Emotional lability, and Eccentricity. Psychopathy is most
6 strongly correlated with Callousness, followed by Deceitfulness, Impulsivity, Eccentricity,
7 Hostility, Suspiciousness, Emotional Lability, Unusual Beliefs & Experiences, Irresponsibility,
8 Distractibility, Restricted Affectivity, Grandiosity, Perceptual Dysregulation, Perseveration,
9 Anxiousness, Anhedonia, Risk Taking, Withdrawal, and Depressivity. Finally, Narcissism is
10 correlated with only three PID-5 facets, namely Grandiosity, Attention Seeking, and
11 Manipulativeness.

12 In sum, this pattern of correlations indicates that there is only one maladaptive facet that is
13 significantly related to each of the dark triad traits, namely Grandiosity. Narcissism is different
14 from the two other dark traits in the sense that it shows only very limited correlations with PID-5
15 facets, whereas Machiavellianism and psychopathy have a much broader connection with the
16 maladaptive trait model. These connections further document both the similarities and the
17 differences between Machiavellianism and psychopathy.

18 3.2. Incremental validity of FFM maladaptive and FFM general personality domains

19 Multiple hierarchical regression analyses were conducted to investigate the incremental
20 validity of FFM maladaptive (PID-5) and FFM general (Big Five) domains when predicting the
21 dark triad (see Table 2). In a first set of regressions, FFM general domains were entered in a first
22 step, followed by the maladaptive domains. Together, Big Five domains explained 18% of the

Table 2

Multiple hierarchical regression analyses predicting dark triad from FFM general (Big Five) and FFM maladaptive (PID5) personality domains

	Machiavellianism			Narcissism			Psychopathy		
	Big5 only	PID5 only	Full model	Big5 only	PID5 only	Full model	Big5 only	PID5 only	Full model
NEO-Neuroticism	.06	--	.01	-.09	--	-.07	.20*	--	.13
PID5-Negative affect	--	.05	.10	--	-.27**	-.23*	--	-.15	-.16
NEO-Extraversion	.15	--	.12	.39***	--	.25**	.09	--	.01
PID5-Detachment	--	.02	.04	--	-.39***	-.21*	--	-.12	-.17
NEO-Agreeableness	-.46***	--	-.27**	-.35***	--	-.12	-.39***	--	-.31***
PID5-Antagonism	--	.60***	.49***	--	.55***	.47***	--	.12	.00
NEO-Conscientiousness	.10	--	.04	.17	--	.11	.02	--	.01
PID5-Disinhibition	--	-.24*	-.20	--	-.04	.04	--	.24*	.25*
NEO-Openness	-.03	--	-.09	.05	--	.01	.05	--	.05
PID5-Psychoticism	--	-.01	-.11	--	.17	.07	--	.31*	.24
R ²	.18***	.26***	.31***	.22***	.29***	.35***	.23***	.20***	.30***
ΔR^2 General traits	.13***	--		.13***	--		.07**	--	
ΔR^2 Maladaptive traits	--	.05*		--	.06**		--	.10***	

Note. Standardized regression coefficients (β) are reported. * $p < .05$; ** $p < .01$; *** $p < .001$.

1 variance in Machiavellianism and only Agreeableness emerged as a significant predictor for this
2 dark trait when all five FFM general domains were considered jointly. Adding maladaptive PID-5
3 domains to the model explained an additional 13% of the variance, and indicated Antagonism as
4 an additional significant predictor. After adding PID-5 domains, the effect of Agreeableness was
5 weaker but still significant. For narcissism, Big Five domains explained 22% of the variance, and
6 this was mostly driven by Extraversion and Agreeableness. Adding PID-5 domains to the model
7 in step 2 added 13% to the variance explained, and indicated Negative Affect, Detachment, and
8 Antagonism as additional predictors. After adding PID-5 domains, the effect of NEO-
9 Extraversion remained significant, whereas the effect of Agreeableness disappeared. Finally, Big
10 Five domains explained 23% of the variance in psychopathy and this was mainly driven by
11 Agreeableness and, to a lesser extent, Neuroticism. Adding PID-5 traits to the model in step 2
12 added 7% to the variance explained, and indicated PID5-Disinhibition as an additional significant
13 predictor. After adding PID-5 domains, Agreeableness remained the only significant FFM
14 general trait predictor.

15 A second series of hierarchical regressions were conducted to investigate the incremental
16 validity of FFM general domains beyond FFM maladaptive domains. The results indicated that
17 for Machiavellianism, FFM maladaptive traits as a set explained 26% of the variance, and this
18 was largely driven by PID5-Antagonism and, to a lesser extent, PID5-Disinhibition. Adding
19 NEO-domains to the model in step 2 significantly increased the percentage of explained variance
20 with an added five percent, showing Agreeableness as an additional significant predictor. For
21 narcissism, FFM maladaptive traits accounted for 29% of the variance, and this was driven by
22 Negative Affect, Detachment, and Antagonism. NEO-domains explained an added 6% of the
23 variance in narcissism, showing Extraversion as an additional predictor. Finally, FFM
24 maladaptive traits accounted for 20% of the variance in psychopathy, and this was mainly driven

1 by Disinhibition and Psychoticism. FFM general NEO-domains accounted for an additional 10%
2 of the variance, indicating Agreeableness as an additional predictor.

3 **4. Discussion**

4 Traditional definitions of the dark triad traits rely on maladaptive trait descriptors such as
5 manipulateness (Machiavellianism), impulsiveness (for psychopathy), and grandiosity (for
6 narcissism) (Jones & Paulhus, 2014). Yet, research on the associations between the dark triad and
7 such maladaptive personality facets is still scarce. The current study aimed to fill this gap in the
8 literature and demonstrated significant associations between the dark triad and the facets from the
9 DSM-5 maladaptive trait model. In addition, the relevance of considering maladaptive
10 personality frameworks such as the DSM-5 model in dark triad research was supported by
11 showing incremental validity of FFM maladaptive personality domains beyond FFM general
12 domains in the prediction of dark triad traits.

13 4.1. Dark triad and DSM-5 maladaptive personality facets

14 The correlations between the dark triad and DSM-5 maladaptive personality facets first
15 helped to clarify what is shared across dark triad traits . Rather than callousness and deceitfulness
16 (e.g., Jones and Paulhus, 2011, 2014), it was grandiosity or the belief of superiority which
17 emerged as the only maladaptive personality facets that correlated with each of the dark triad
18 traits.

19 Regarding differences between the dark triad traits, narcissism stood out, showing only
20 minimal but well interpretable overlap with the DSM-5 maladaptive facets. As predicted by
21 Paulhus (2014), the unique feature that separates narcissism from the other two dark traits is
22 abnormal attention seeking, or the extreme desire to make oneself the focus of others' attention
23 and admiration.

1 The current results are particularly relevant to shed light on the differences and
2 similarities between Machiavellianism and psychopathy, two traits whose distinctiveness is
3 currently being questioned in the literature (Miller, Hyatt, Maples-Keller, Carter, & Lynam, in
4 press). The results of the current study indicate a number of socially aversive tendencies (besides
5 grandiosity) underlying both these dark traits. The findings particularly suggest that their
6 interpersonal relations are characterized by deceit, hostility towards others, and a high level of
7 distrust in other people's intentions. Further, their emotional life is portrayed as complex,
8 showing little or no sentiment for the harm they cause others and only restricted affectivity in
9 normatively engaging situations; but at the same time emotional outbursts may occur in response
10 to seemingly irrelevant events. Finally, the results also show that both Machiavellians and
11 psychopaths may display eccentricity in their way of behaving, talking or feeling, and this may
12 also reflect a tendency to hold rather unusual beliefs about themselves and/or their abilities.

13 Beyond their communalities, the pattern of associations with the maladaptive trait model
14 also helps to clarify the differences between Machiavellianism and psychopathy. Characteristic
15 for Machiavellianism in the current sample is the significant and positive association with rigid
16 perfectionism. This suggests that Machiavellians want everything to be flawless and perfect, and
17 are convinced that there is only one right way or strategy to achieve this. Psychopathy, on the
18 other hand, is uniquely associated with impulsivity, irresponsibility and distractibility. This
19 indicates that psychopaths tend to act upon momentary impulses rather than well thought out
20 strategy; they tend to be easily distracted from their goal and make errors trying to get there.
21 While these differences between psychopathy and Machiavellianism have been proposed earlier
22 in theory (Jones & Paulhus, 2014), the current results are the first to substantiate this empirically.

23

1 4.2. Comparing FFM maladaptive and FFM general domains as predictors of dark triad traits

2 As a second objective, the current study was the first to investigate the dark triad traits in
3 relation to both general and maladaptive personality models, and to compare the predictive
4 effects of these models at the level of the broad FFM domains. The current findings provided
5 further support for the relevance of the DSM-5 maladaptive trait model in this context given the
6 unique associations it shows with the dark triad model. For example, the results indicated that
7 only the maladaptive variant of FFM Openness, i.e. Psychoticism, correlated significantly with
8 Machiavellianism and psychopathy, highlighting a certain degree of oddity (e.g., Verbeke & De
9 Clercq, 2014) that is shared by these dark triad traits and that is not captured by general FFM
10 Openness.

11 The incremental validity of FFM general versus FFM maladaptive trait domains was
12 further tested using regression analyses. For Machiavellianism and narcissism, the increments
13 associated with maladaptive DSM-5 domains were substantially larger compared to the
14 increments associated with general Big Five domains, highlighting the abnormal nature of dark
15 triad traits as subclinical constructs. When maladaptive and general domains were considered
16 jointly, it was mainly Antagonism that was driving incremental validity in predicting the dark
17 traits. Interestingly, for Psychopathy the increments associated with both sets of FFM predictors
18 were more in balance. This was mostly due to the fact that, for this particular dark trait, general
19 Agreeableness outperformed Antagonism when considered jointly. This is rather remarkable
20 given that callous antipathy towards others, as captured by Antagonism, is considered one of the
21 hallmarks of psychopathy (Strickland et al., 2013).

22 4.3. Limitations and conclusions

1 The current study was the first to simultaneously relate Machiavellianism and subclinical
2 narcissism and psychopathy to the DSM-5 maladaptive trait model, allowing further insights into
3 the similarities and differences within the dark triad. Based on the present analyses, it can be
4 concluded that maladaptive traits can indeed further our understanding of the dark triad, by
5 tapping into abnormal personality space that is not covered by general frameworks, such as the
6 Big Five. One limitation of the present study, however, was that general and maladaptive FFM
7 traits could only be directly compared at the domain level, because no general FFM facet level
8 information was available. Future research could, hence, address the relative importance of both
9 general FFM facets (such as measured by for instance the NEO PI-R; Costa & McCrae, 1992)
10 and maladaptive FFM facets (such as covered by the PID-5; Krueger et al., 2012). Similarly,
11 future research might also examine the extent to which the current results generalize to other
12 measures of the dark triad and to other research populations. Doing so may further clarify the
13 position of the dark traits as subclinical constructs within both normal and abnormal personality
14 space.

15

References

- Aghababaei, N., & Blachnio, A. (2015). Well-being and the dark triad. *Personality and Individual Differences, 86*, 365-368.
- Costa, P. T., & McCrae, R. R. (1992). *NEO-PI-R professional manual*. Odessa, FL: Psychological Assessment Resources.
- De Fruyt, F., De Clercq, B., De Bolle, M., Wille, B., Markon, K. E., & Krueger, R. F. (2013). General and maladaptive traits in a five-factor framework for DSM-5 in a university student sample. *Assessment, 20*, 295-307.
- Furnham, A., Richards, S. C., & Paulhus, D. L. (2013). The dark triad of personality: A 10 year review. *Social and Personality Psychology Compass, 7*, 199-216.
- Glenn, A. L., & Sellbom, M. (2015). Theoretical and empirical concerns regarding the dark triad as a construct. *Journal of Personality Disorders, 29*, 360-377.
- Gore, W. L., & Widiger, T. A. (2013). The DSM-5 dimensional trait model and five-factor models of general personality. *Journal of Abnormal Psychology, 122*, 816-821.
- Iliescu, D., Ispas, D., Sulea, C., & Ilie, A. (2015). Vocational fit and counterproductive work behaviors: A self-regulation perspective. *Journal of Applied Psychology, 100*, 21-39.
- Ispas, D., Iliescu, D., Ilie, A., & Johnson, R. E. (2014). Exploring the cross-cultural generalizability of the Five-Factor Model of personality: The Romanian NEO PI-R. *Journal of Cross-Cultural Psychology, 45*, 1074-1088.
- Jonason, P. K., & Jackson, C. J. (2016). The dark triad traits through the lens of Reinforcement Sensitivity Theory. *Personality and Individual Differences, 90*, 273-277.
- Jonason, P. K., Lyons, M., & Blanchard, A. (2015). Birds of a "bad" feather flock together: The dark triad and mate choice. *Personality and Individual Differences, 78*, 34-38.

- Jones, D. N., & Paulhus, D. L. (2011). Differentiating the dark triad within the interpersonal circumplex. In L. M. Horowitz & S. Strack (Eds.), *Handbook of interpersonal psychology: Theory, research, assessment, and therapeutic interventions* (pp. 249-268). New York: Wiley.
- Jones, D. N., & Paulhus, D. L. (2014). Introducing the Short Dark Triad (SD3): A brief measure of dark personality traits. *Assessment, 21*, 28-41.
- Krueger, R. F., Derringer, J., Markon, K. E., Watson, D., & Skodol, A. E. (2012). Initial construction of a maladaptive personality trait model and inventory for DSM-5. *Psychological Medicine, 42*, 1879-1890.
- Krueger, R. F., & Markon, K. E. (2014). The role of the DSM-5 personality trait model in moving toward a quantitative and empirically based approach to classifying personality and psychopathology. *Annual Review of Clinical Psychology, 10*, 477-501.
- Lee, K. B., & Ashton, M. C. (2005). Psychopathy, Machiavellianism, and narcissism in the Five-Factor Model and the HEXACO model of personality structure. *Personality and Individual Differences, 38*, 1571-1582.
- McHoskey, J. W., Worzel, W., & Szyarto, C. (1998). Machiavellianism and psychopathy. *Journal of Personality and Social Psychology, 74*, 192-210.
- Miller, J. D., Gentile, B., Wilson, L., & Campbell, W. K. (2013). Grandiose and vulnerable narcissism and the DSM-5 pathological personality trait model. *Journal of Personality Assessment, 95*, 284-290.
- Miller, J. D., Hyatt, C. S., Maples-Keller, J. L., Carter, N. T., & Lynam, D. R. (in press). Psychopathy and Machiavellianism: A distinction without a difference? *Journal of Personality*.

- O'Boyle, E. H., Forsyth, D. R., Banks, G. C., & McDaniel, M. A. (2012). A meta-analysis of the dark triad and work behavior: A social exchange perspective. *Journal of Applied Psychology, 97*, 557-579.
- O'Boyle, E. H., Forsyth, D. R., Banks, G. C., Story, P. A., & White, C. D. (2015). A meta-analytic test of redundancy and relative importance of the dark triad and Five-Factor Model of personality. *Journal of Personality, 83*, 644-664.
- Paulhus, D. L. (2014). Toward a taxonomy of dark personalities. *Current Directions in Psychological Science, 23*, 421-426.
- Paulhus, D. L., & Williams, K. M. (2002). The dark triad of personality: Narcissism, Machiavellianism, and psychopathy. *Journal of Research in Personality, 36*, 556-563.
- Strickland, C. M., Drislane, L. E., Lucy, M., Krueger, R. F., & Patrick, C. J. (2013). Characterizing psychopathy using DSM-5 personality traits. *Assessment, 20*, 327-338.
- Turnipseed, D. L., & Cohen, S. R. (2015). Academic entitlement and socially aversive personalities: Does the dark triad predict academic entitlement? *Personality and Individual Differences, 82*, 72-75.
- Verbeke, L., & De Clercq, B. (2014). Integrating oddity traits in a dimensional model for personality pathology precursors. *Journal of Abnormal Psychology, 123*, 598-612.

Appendix:

Descriptions of the DSM-5 maladaptive personality facets and domains

DSM-5 maladaptive traits	Definition
<i>Facets:</i>	
Emotional Lability	Unstable emotional experiences and mood; emotions that are intense and/or out of proportion
Anxiousness	Nervousness, tenseness, frequent worry; feeling fearful and expecting the worst to happen
Separation Insecurity	Fear of being rejected and/or separated from significant others, based in a lack of confidence in one's ability to care for oneself
Submissiveness	Extreme adaptation of one's behavior to the (perceived) interests and desires of others
Hostility	Persistent or frequent feelings of anger; irritability in reaction to minor offenses; mean, nasty or vengeful behavior
Perseveration	Persistence in a particular way of doing things long after the behavior has ceased to be functional or effective
Withdrawal	Strong preference for being alone to being with others; lack of initiation of social contact
Intimacy avoidance	Avoidance of close or romantic relationships, interpersonal attachments, and intimate sexual relationships
Anhedonia	Lack of enjoyment from or energy for life experiences; inability to feel pleasure or take interest in things
Depressivity	Feelings of being down, miserable, and/or hopeless; difficulty recovering from such moods; feelings of inferior self-worth
Restricted affectivity	Constricted emotional experience and expression; indifference and aloofness in normatively engaging situations
Suspiciousness	Expectations of signs of interpersonal ill-intent or harm; doubts about loyalty and fidelity of others
Manipulativeness	Use of deception, seduction, charm, glibness, or ingratiation to achieve one's needs
Deceitfulness	Dishonesty and fraudulence; misrepresentation of self; exaggeration or fabrication when relating events
Grandiosity	Believing that one is superior to others and deserves special treatment; self-centeredness; condescension toward others
Attention Seeking	Behavior designed to attract notice and to make oneself the focus of others' attention and admiration
Callousness	Lack of concern for feelings or problems of others; lack of guilt or remorse about the harmful effects of one's actions on others
Irresponsibility	Lack of respect for -and lack of follow through on- agreements and promises; carelessness with others' property
Impulsivity	Acting on a momentary basis without a plan or consideration of outcomes; a sense of urgency and self-harming behavior under distress
Distractibility	Difficulty concentrating and focusing on tasks; difficulty maintaining goal-focused behavior, including both planning and completing tasks

Risk Taking	Dangerous, risky, and potentially self-damaging activities, unnecessarily and without regard to consequences; reckless
Eccentricity	Odd, unusual, or bizarre behavior, appearance, and/or speech; having strange and unpredictable thoughts
Rigid Perfectionism	Rigid insistence on everything being flawless, perfect, and without errors; believing that there is only one right way to do things
Cognitive & Perceptual Dysregulation	Odd or unusual thought processes and experiences, including depersonalization, derealization, and dissociative experiences
Unusual Beliefs & Experiences	Belief that one has unusual abilities, such as mind reading, telekinesis, thought-action fusion, unusual experiences of reality

Domains:

Negative Affect = Anxiousness + Emotional Lability + Separation Insecurity:

Frequent and intense experiences of high levels of a wide range of negative emotions (e.g., anxiety, depression, guilt/shame, worry, anger) and their behavioral (e.g., self-harm) and interpersonal (e.g., dependency) manifestations

Detachment = Withdrawal + Anhedonia + Intimacy Avoidance

Avoidance of socioemotional experience, including both withdrawal from interpersonal interactions and restricted affective experience and expression, particularly limited hedonic capacity

Antagonism = Manipulativeness + Deceitfulness + Grandiosity

Behaviors that put the individual at odds with other people, including an exaggerated sense of self-importance and a concomitant expectation of special treatment, as well as a callous antipathy toward others

Disinhibition = Irresponsibility + Impulsivity + Distractibility

Orientation toward immediate gratification, leading to impulsive behavior driven by current thoughts, feelings, and external stimuli, without regard for past learning or consideration of future consequences.

Psychoticism = Unusual Beliefs and Experiences + Eccentricity + Perceptual Dysregulation

A wide range of culturally incongruent odd, eccentric, or unusual behaviors and cognitions, including both process (e.g., perception, dissociation) and content (e.g., beliefs)
