The Dark Triad and Interpersonal Perception: Similarities and Differences in the Social Consequences of Narcissism, Machiavellianism, and Psychopathy

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Abstract

The subclinical Dark Triad traits narcissism, Machiavellianism, and psychopathy (Paulhus & Williams, 2002) are related to antagonistic behaviors in interpersonal situations. The current study addresses whether these three traits entail different social consequences by investigating self-ratings, ratings of others, and ratings by others for the Dark Triad. In a naturalistic setting, 93 informal, minimally acquainted student dyads worked briefly on a cooperative task and subsequently provided self- and other- ratings on the Big Five and intelligence, self-ratings on the Dark Triad, and ratings on properties of the interaction. Overall, narcissism, Machiavellianism, and psychopathy manifested differently: profile analyses indicated that Machiavellians diverged from narcissists and psychopaths in self-ratings, ratings of others, and ratings by others, while narcissists and psychopaths converged to a moderate degree. Findings are discussed regarding the distinction of the Dark Triad traits.

Keywords

Dark Triad, narcissism, Machiavellianism, psychopathy, interpersonal perception, personality judgment, communication and interaction, social consequences

"Dark personalities,"[1] people scoring highly on dark traits, may seem charming and flattering at first, but further interactions with them can prove them "toxic" as they tend to employ self-beneficial and exploitive behaviors in interpersonal situations. The current study aims at investigating interpersonal perception in informal dyads to elucidate patterns of social consequences for nonpathological forms of narcissism, Machiavellianism, and psychopathy.

The Dark Triad

Subclinical narcissism, Machiavellianism, and psychopathy are referred to as the Dark Triad (Paulhus & Williams, 2002) due to (a) their socially undesirable nature, (b) similar phenotypical behaviors (e.g., manipulation), (c) positive intercorrelations of their scales, and (d) conceptual similarities (e.g., ego-centricity). *Narcissism* is the tendency to harbor grandiose and inflated self-views while devaluing others (e.g., Morf & Rhodewalt, 1993, 2001). Narcissists are shown to exhibit extreme vanity; attention and admiration seeking; feelings of superiority, authority, and entitlement; exhibitionism and bragging; and manipulation (Raskin & Terry, 1988). *Machiavellianism* is the tendency to cynical, misanthropic, cold, pragmatic, and

immoral beliefs; detached affect; pursuit of self-beneficial and agentic goals (e.g., power, money); strategic long-term planning; and manipulation tactics (Christie & Geis, 1970; Fehr, Samsom, & Paulhus, 1992; Rauthmann & Will, 2011). *Psychopathy* is the tendency to impulsive thrill-seeking, cold affect, manipulation, and antisocial behaviors (Williams, Nathanson, & Paulhus, 2003), often falling into a primary (affective shallowness, lack of empathy and remorse, superficial charm, and manipulation) and secondary component (social deviance, low socialization, impulsivity, irresponsibility, aggression, sensation seeking, delinquency; Hare, 2003).

On the one hand, there is evidence from evolutionary arguments, interpersonal circumplex studies, and trait research to support "unificationist theories" that narcissism, Machiavellianism, and psychopathy represent identical constructs or

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slight nuances of one underlying, global dark personality factor (e.g., Jonason, Li, Webster, & Schmitt, 2009; Jonason, Li, & Teicher, 2010; Jones & Paulhus, 2010; Lilienfeld & Andrews, 1996; McHoskey, 1995, 2001; McHoskey, Worzel, & Szyarto, 1998). On the other hand, evidence for "discrimination theories" conceiving narcissism, Machiavellianism, and psychopathy as separate domains has also accrued (e.g., Jones & Paulhus, 2010; Vernon, Villani, Vickers, & Harris, 2008) as the Dark Triad traits have been shown to differ in biological bases, underlying processes and dynamics, and association patterns with other constructs within nomological networks. Indeed, the Dark Triad traits may show overlap in some respects (e.g., short-term mating; Jonason & Webster, 2010), while not in others (e.g., self-monitoring; Rauthmann, 2011). It remains, however, unclear so far how similarities or differences pan out in initial social interactions. Thus, the current work specifically investigates how narcissists, Machiavellians, and psychopaths (a) perceive others, (b) are perceived by others, and (c) impact communication when there is only little acquaintance. If the Dark Triad traits reflect distinct domains and rely on differing intrapersonal and interpersonal processes, they should entail different social consequences (such as being differently perceived by others).

The Interpersonal Style of Dark Personalities: How They Behave

Dark personalities are considered toxic and antagonistic as they share an exploitive behavioral style—agentically oriented striving for self-beneficial goals at the expense of or at least without regard for communal welfare and others (Jones & Paulhus, 2010). Hence, dark personalities' demeanor in social situations is often marked by coldhearted, self-beneficial, and manipulative behaviors (Paulhus & Williams, 2002). Accordingly, Jones and Paulhus (2011) state that "Quadrant 2 of the interpersonal circumplex (i.e., high-agency low-communion) is inhabited by individuals variously characterized as arrogant, calculating, callous, and manipulative" (p. 250). Dark personalities indeed exhibit behaviors high in agency (getting ahead) and low in communion (getting along), which reflects their antisociality. It can thus be expected that dark personalities should also describe themselves primarily as antagonistic (i.e., higher agency, lower communion; see Jones & Paulhus, 2010; Paulhus & Williams, 2002).

Dark Personalities' Perceptions of Others: How They See Others-

Agreeableness reflects a positive orientation toward others (Costa & McCrae, 1985), and negative correlations between NEO-Agreeableness and the Dark Triad are robust findings (Jones & Paulhus, 2010). Thus, dark personalities seem to generally harbor negative other- models (often concomitant with positive self-models) that lead them to judge others- more unfavorably or even dislike them. *Narcissists* have been found to engage in other- derogation (Morf & Rhodewalt, 1993), while

aggrandizing the self which is possibly a route to self-enhancement in narcissism. *Machiavellians* also view others unfavorably. In their cynical and misanthropic world view, people are weak, fallible, and manipulable (Christie & Geis, 1970; Jones & Paulhus, 2010; Rauthmann & Will, 2011). However, it has not been found that they would self-enhance while devaluing others (Paulhus & Williams, 2002). *Psychopaths*' low regard for others, extreme disagreeableness, irresponsibility, and low levels of empathy also suggest negative other-models (e.g., Hare, 2003). Hence, dark personalities can be expected to see others in a primarily negative way (i.e., lower agency and lower communion) due to negative other-models.

Others' Perceptions of Dark Personalities: How They Are Seen

Narcissists can be popular, charming, and liked at first (Back, Schmukle, & Egloff, 2010; Foster, Shrira, & Campbell, 2006; Oltmanns, Friedman, Fiedler, & Turkheimer, 2004), but they are seen less favorably as interactions and relationships progress (Back et al., 2010; Campbell, Foster, & Finkel, 2002; Paulhus, 1998). For example, narcissists are initially described as agreeable, competent, and entertaining but later with Quadrant II traits from the interpersonal circumplex such as arrogant, hostile, or antagonistic (Paulhus, 1998; Wink, 1991). This suggests that narcissists have, at least initially, positive qualities to them which can make them popular, but in the long run they lose their positive reputation and their likeability decreases. There are mixed findings on how *Machiavellians* are perceived by others (Fehr et al., 1992; Jones & Paulhus, 2009). On the one hand, young Machiavellians appear to be liked (Hawley, 2003; Newcomb, Bukowski, & Pattee, 1993) and adult Machiavellians are liked under certain circumstances (e.g., Coie, Dodge, & Kupersmidt, 1990; Deluga, 2001; Ickes, Reidhead, & Patterson, 1986; Simonton, 1986; Wilson, Near, & Miller, 1998). On the other hand, Machiavellian behaviors are often socially unaccepted (Falbo, 1977), and people judge Machiavellians more negatively after prolonged interactions (Wilson et al., 1998). It thus remains unclear whether Machiavellians appear initially more positively or negatively to others. Layperson perceptions of subclinical *psychopaths* are underexplored as of yet (see, however, Fowler, Lilienfeld, & Patrick, 2009), but due to (superficial) charming behavior and interpersonal manipulation, they might appear at first similar to narcissists (i.e., interesting, entertaining), while they are judged more unfavorably as interactions progress (i.e., when antisocial behaviors leak out). On the other hand, psychopaths' lack of regard for others and impulsiveness may make them repulsive from the start. Altogether, dark personalities should be largely seen as somewhat antagonistic (i.e., higher agency, lower communion) when they interact with others.

The Current Study

The current study addresses two grand questions to highlight similarities and differences between narcissism,

Machiavellianism, and psychopathy. First, how do dark personalities perceive themselves, properties of the interaction, and others? Second, how do others perceive dark personalities and properties of the interaction? These questions culminate in the question of whether narcissism, Machiavellianism, and psychopathy represent identical or at least fairly similar trait domains. This work is a first endeavor to study the Dark Triad traits alongside each other in a naturalistic setting with informal, minimally acquainted student dyads concerning interpersonal perception and social consequences. Additionally to ratings of traits and intelligence, information on properties of the interaction was collected. This allows comparing respective patterns of the Dark Triad traits across many variables in a social context to unravel whether the three traits manifest differently or not.

Method

Participants and Procedure

Hundred and eighty-six first-year psychology students (73.2% females; mean age = 22.49 years, SD = 2.79, range: 19–34) interacted in 93 randomly assigned dyads for 7 min in a classroom setting. They had to solve the NASA Game (rank ordering 15 items according to their importance when stranded on the moon and trying to get back to the base station). Subsequently, they provided self- and other ratings on several traits as well as information on properties of the interaction. The mean level of acquaintance among participants was 3.8 (from 1 = *I have never seen this person before* to 8 = *We know each other well*; point 4 read *I don't know this person, but may have briefly talked to him/ her on occasion*). This is "minimal/short" in accordance with Kenny (1994, p. 57) as "the perceiver and target meet for a brief time (usually no more than an hour)," which "includes studies of classroom groups even if they met throughout the semester." Students obtained credit points for participating.

Measures

The NASA game. The game comes in different variants, but the main goal is to rank order items according to their importance. For this research, not the content of the game, but its function was important. The explicit instruction was to cooperate with each other and solve the game together. Social consequences of dark traits can be expected particularly in situations that impose affordances of selfishness versus cooperation (translated into agency vs. communion behaviors). The task should also elicit interaction (as opposed to many laboratory settings where there is no true or only restricted communication) so that personality-relevant information would leak out. In sum, the NASA Game was chosen because it (a) is easily comprehendible, (b) imposes a cooperation situation, and (c) elicits discussion. Scores on the NASA Game were not computed.

The Dark Triad. Narcissism was measured on a 5-point Likert-type scale (0 = *not at all like me* to 4 = *totally like me*) with a 17-item inventory based on Raskin and

Terry's (1988) Narcissistic Personality Inventory (NPI) scale (von Collani, 2008). A sum score was computed. *Machiavellianism* was measured on a 6-point Likert-type scale (0 = *not at all like me* to 5 = *totally like me*) with an 18-item scale based on Christie and Geis' (1970) scale (Henning & Six, 2008). A sum score was computed. *Psychopathy* was measured on a 5-point Likert-type scale (from 0 = *not at all like me* to 4 = *totally like me*) with a 30-item version of the Self-Report Psychopathy Scale-III (Williams et al., 2003). Means were computed.

Traits. Traits were rated for self and others from 1 (*not at all like me/the other person*) to 8 (*completely like me/the other person*) on 124 items of the Interpersonal Adjectives Scale— Revised— Big Five (IAS-R-B5: Trapnell & Wiggins, 1990). The inventory assesses eight interpersonal trait scales or octants (assured-dominant vs. unassured-submissive, unassuming-ingenuous vs. arrogant-calculating, warm-agreeable vs. coldhearted, gregarious-extraverted vs. aloof-introverted), resembling rotated and blended versions of Extraversion/Dominance/Agency and Agreeableness/Nurturance/Love/Communion. Additionally, it assesses Neuroticism (anxious, self-conscious, overexcitable, etc. vs. relaxed, stable, unagitated, etc.), Openness (unconventional, abstract thinking, individualistic, etc. vs. unreflective, conventional, unartistic, etc.), and Conscientiousness (orderly, reliable, self-disciplined, etc. vs. inefficient, unsystematic, forgetful, etc.) but without subfacets. The octants were simplified to *Dominance* (assertive, dominant, persistent, etc. vs. timid, meek, unauthoritive, etc.), *Nurturance* (softhearted, kind, accommodating, etc. vs. ruthless, hardhearted, unsympathetic, etc.), *Ingenuousness* (undemanding, unsly, uncrafty, etc. vs. boastful, cocky, cunning, etc.), and *Gregariousness* (cheerful, friendly, outgoing, etc. vs. unsparkling, antisocial, distant, etc.) by subtracting the negative scales from the positive ones.

Intelligence. Self- and other-reported intelligence was measured on 11 dimensions commonly associated with a broader sense of "intelligence" (verbal understanding, verbal fluency, mathematical intelligence, spatial intelligence, memory, perceptional velocity, logical-deductive reasoning, musical intelligence, kinesthetic intelligence, interpersonal skills, intrapersonal skills; cf. Gardner, 1999). People were given short descriptions of each dimension, which was assessed with one item and a scale ranging from −3 to +3 with 0 as the anchor of average ability. The first nine intelligence forms yielded a global intelligence score for self- and other ratings in factor analysis (principal axis factoring, direct oblimin with δ = 0). Interpersonal and intrapersonal skills were treated as separate forms (as they do not capture "intelligences" per se, but rather a mix of skills or competencies and traits).

Properties of the Interaction. How people see others and rate communication with them can be seen as social consequences from diverse interpersonal behaviors. Thus, information on interaction properties was sampled with 26 items in five broad categories to be answered on 6-point Likert-type scales (0 = *not at all accurate* to 5 = *totally accurate*): affect during

interaction (4 items: e.g., unhappy vs. happy), evaluation of communication situation (7 items: e.g., situation was pleasant vs. unpleasant), evaluation of teamwork (5 items: e.g., positive vs. negative team atmosphere), evaluation of the problem-solving process (6 items: e.g., agreement vs. discussion; cooperation vs. rivalry), and evaluation of the other person (4 items: e.g., liked vs. unliked). A composite score was derived for each dimension (principal axis factoring, direct oblimin with $\delta = 0$).

Statistical Analyses

How dark personalities see themselves (self-ratings), others (ratings of others), and are seen by others (ratings by others) is investigated with multiple regressions, treating the Dark Triad (narcissism, Machiavellianism, and psychopathy) as predictors and self ratings, ratings of others, and ratings by others, respectively, as outcomes. Additionally, ratings of interaction properties from the self- and other-view were used as outcomes. To ensure fair comparisons among the Dark Triad traits (that differed in internal consistency reliabilities), disattenuated regression coefficients βs are presented. Findings are presented in graphical form to facilitate detection of similarities and differences between the Dark Triad traits.[2]

Decisions on the similarity of the Dark Triad traits regarding social–interpersonal consequences should not be solely based on single effect sizes possibly differing in presence, magnitude, and direction but also on entire profiles. If two constructs exhibit correlational patterns across different criteria, the overall profile similarity between these constructs can be quantified by correlating the z standardized coefficient values, which yields global comparisons to provide a picture of convergence or divergence between two constructs with significance testing (e.g., Miller et al., 2011). These vector correlations were based on disattenuated, z transformed β coefficients for trait ratings (10 variables: 7 traits and 3 intelligences) and properties of the interaction ratings (5 variables).[2]

Results

Descriptive Statistics

Descriptive statistics (means, standard deviations, Cronbach's αs) are presented in Table 1 for the Dark Triad self-ratings and IAS-R-B5 self- and other-ratings. The Dark Triad traits intercorrelated at best modestly (narcissism–Machiavellianism: $r = .29$, narcissism–psychopathy: $r = .39$, Machiavellianism–psychopathy: $r = .30$, ps < .001), indicating that they should be treated as distinct traits in further analyses.

How Dark Personalities See Themselves

As can be seen in Figure 1 ("How dark personalities see themselves"), the Dark Triad traits were differentially associated with traits and intelligences in self-ratings. Specifically, narcissism showed significant positive associations with Dominance, Gregariousness, Openness, Conscientiousness, and all intelligence forms. It was thus primarily associated with agency

Table 1. Descriptive Statistics of Self– and Other Ratings for Traits

Scales	Self-Ratings			Other Ratings		
	M	SD	α	M	SD	α
Narcissism	47.39	9.65	.84			
Machiavellianism	43.26	11.58	.85			
Psychopathy	2.55	0.36	.72			
Dominance	1.42	1.65	.76	1.16	1.82	.81
Ingenuousness	4.33	1.51	.72	4.21	1.59	.76
Nurturance	2.13	1.71	.86	2.99	1.51	.73
Gregariousness	3.65	1.55	.81	4.01	1.78	.58
Neuroticism	3.21	0.83	.89	4.07	0.90	.80
Openness	5.36	0.66	.76	5.73	0.62	.88
Conscientiousness	5.77	0.86	.92	5.42	1.04	.87

$N = 186$.

traits. Machiavellianism showed significant negative associations with Dominance, Nurturance, Gregariousness, Openness, and all intelligence forms. It was thus negatively associated with agency and communion traits. Psychopathy showed significant positive associations with Dominance and Openness and significant negative associations with Nurturance, Neuroticism, and Conscientiousness. It was thus positively associated with agency and negatively with communion traits. Only Ingenuousness was negatively associated with all three Dark Triad traits, indicating self-ascribed arrogance/calculation in dark personalities.

How Dark Personalities See Others

As can be seen in Figure 2 ("How dark personalities see others"), there were again differences between the Dark Triad traits. Specifically, narcissists saw others only as less conscientious. Psychopaths had neither significantly positive nor negative views of others. Machiavellians, however, saw others as low in Nurturance, Gregariousness, Openness, global intelligence, and interpersonal skills. That dark personalities would see others in a negatively tainted way was thus clearly supported only for Machiavellianism.

How Dark Personalities Are Seen By Others

As can be seen in Figure 3 ("How dark personalities are seen by others"), there were again differences between the Dark Triad traits. Specifically, narcissists were not seen particularly negatively but only low in Ingenuousness. Machiavellians were seen as low in Dominance, Gregariousness, and Openness. Psychopaths were seen as high in Dominance but low in Nurturance, Ingenuousness, and Conscientiousness. That dark personalities are seen negatively is thus only partially supported.

How Dark Personalities See Interaction Properties

As can be seen in Figure 4 ("How dark personalities see interaction properties"), narcissists and psychopaths did not view communicating with others negatively on any dimension.
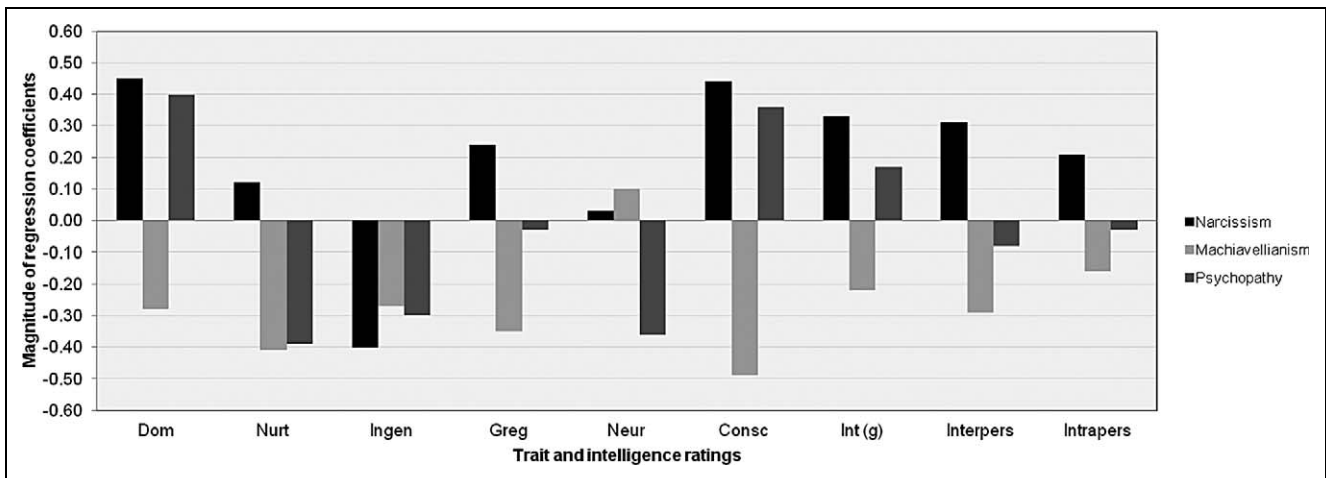
Figure 1. How dark personalities see themselves. Dom = dominance, Nurt = nurturance, Ingen = ingenuousness, Neur = neuroticism, Consc = conscientiousness, Int (g) = global intelligence score, Interpers = interpersonal intelligence, Intrapers = intrapersonal intelligence. Bars represent the magnitudes of disattenuated β regression coefficients. Coefficients above |.21| are significant at $p < .05$.
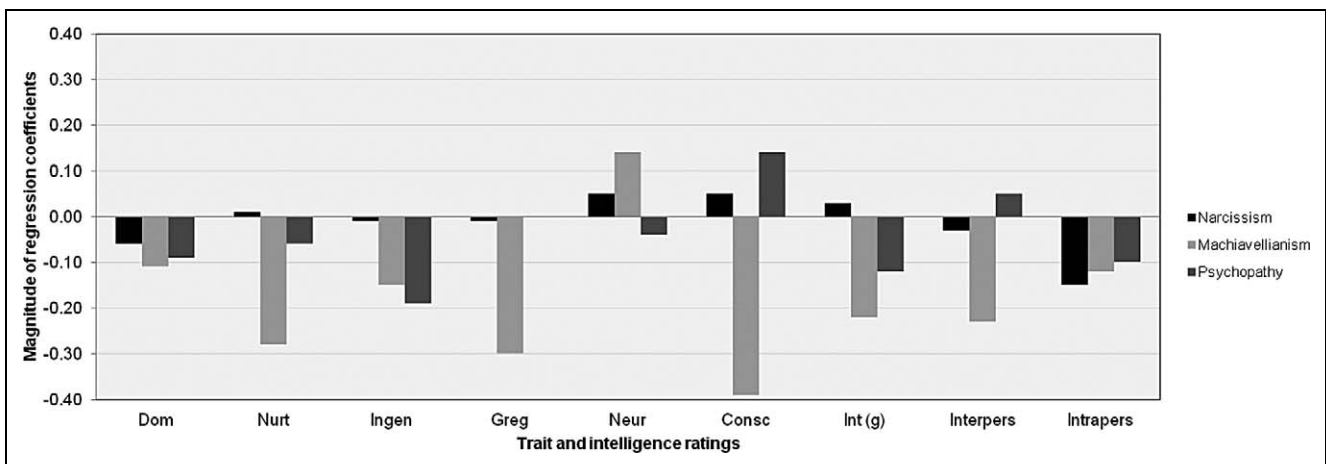

Figure 2. How dark personalities see others. Dom = dominance, Nurt = nurturance, Ingen = ingenuousness, Neur = neuroticism, Consc = conscientiousness, Int (g) = global intelligence score, Interpers = interpersonal intelligence, Intrapers = intrapersonal intelligence. Bars represent the magnitudes of disattenuated β regression coefficients. Coefficients above |.20| are significant at $p < .05$.

Only Machiavellians had significant negative views of the teamwork situation and their partners. Here, Machiavellians' negative views of others seem paralleled in negative views of interaction properties.

How Others See Interaction Properties

As can be seen in Figure 5 (''How others see interaction properties when interacting with dark personalities''), communication with narcissists was not seen as negatively. There was a tendency for Machiavellians to be seen as less sympathetic and bringing about negative consequences for teamwork. Psychopaths, however, were judged negatively by their partners.

Profile Similarities

As can be seen in Table 2, Machiavellians generally showed divergent profiles from narcissists and psychopaths, as indicated by inverse profile relations. Narcissists and psychopaths, however, seemed to converge. It should be noted that most profile similarities can be considered low to moderate in this context, which supports the distinctiveness of the Dark Triad traits.

Discussion

It was investigated for the first time how narcissists, Machiavellians, and psychopaths viewed themselves, others, and communicating with others as well as how others viewed them and communicating with them. This allowed detecting similarities
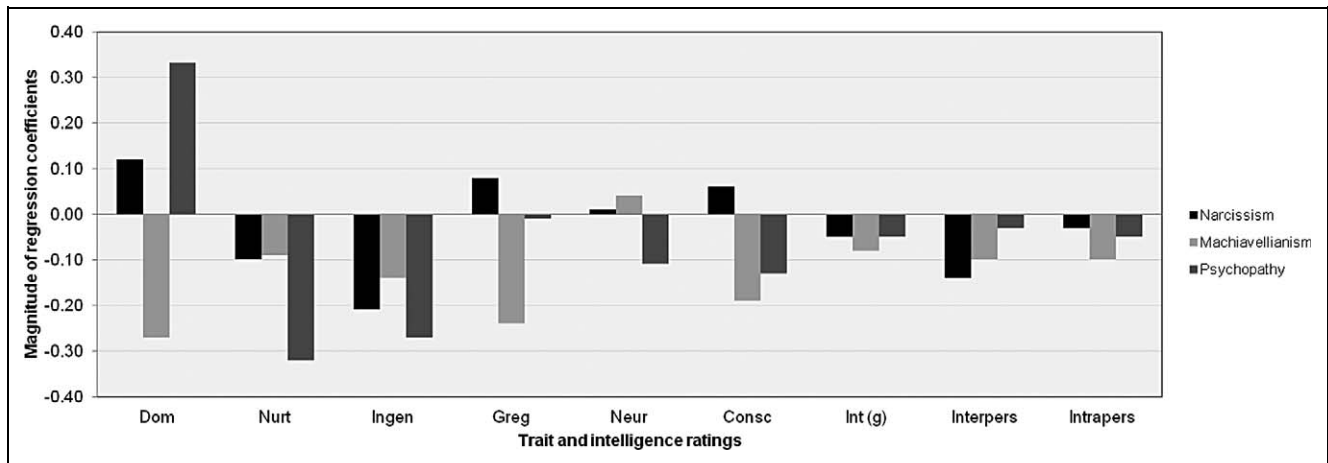
Figure 3. How dark personalities are seen by others. Dom = dominance, Nurt = nurturance, Ingen = ingenuousness, Neur = neuroticism, Consc = conscientiousness, Int (g) = global intelligence score, Interpers = interpersonal intelligence, Intrapers = intrapersonal intelligence. Bars represent the magnitudes of disattenuated β regression coefficients. Coefficients above |.21| are significant at $p < .05$.
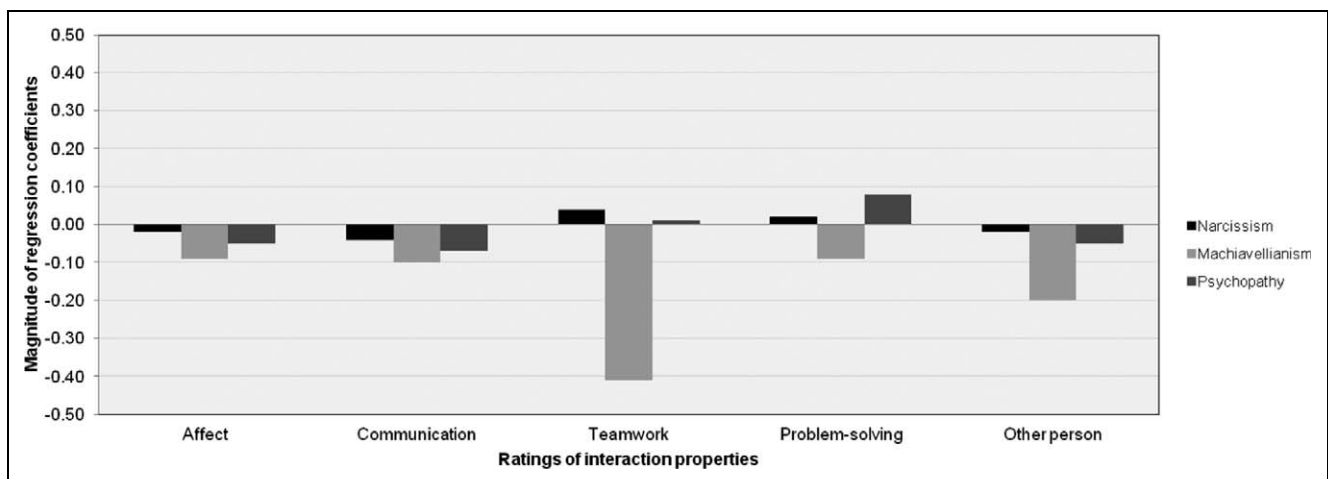

Figure 4. How dark personalities see interaction properties. Bars represent the magnitudes of disattenuated β regression coefficients. Coefficients above |.20| are significant at $p < .05$.

and differences between Dark Triad traits regarding social consequences. Questions, findings, and conclusions drawn in the current study are summarized in Table 3. The overall pattern of findings suggests that the Dark Triad cannot be traced back to one single factor as they differ in many respects and entail different social consequences.

Interpretation

Narcissism. Narcissists showed no other-derogation (except for seeing others as less conscientious), but self-aggrandizement in agentic traits (e.g., assertive, outgoing, open, intelligent, etc.) may still be apparent. Indeed, the profiles of ratings from narcissists indicate that narcissists may have a unique (positive) view of themselves, distinct from how they see others and from how others see them. Partners neither viewed narcissists

favorably nor unfavorably but were able to (accurately) identify low Ingenuousness (i.e., arrogance) in narcissists, which suggests that at least some unpleasant sides of narcissism leak out in cooperative situations after short time (cf. Back et al., 2010). This, however, did not affect communication quality as rated by partners, suggesting that narcissists do not evoke a hostile or toxic working atmosphere in short-term interactions at initial stages of acquaintance.

Machiavellianism. Machiavellians saw themselves and were seen as low on Dominance, Gregariousness, and Openness, which fits well to the conception of the Machiavellian as a conservative, cold, and aloof strategian (Christie & Geis, 1970; Jones & Paulhus, 2010). They had condescending views of others: interaction partners were seen as low on Nurturance, Gregariousness, Openness, and intelligence. Thus, Machiavellians'
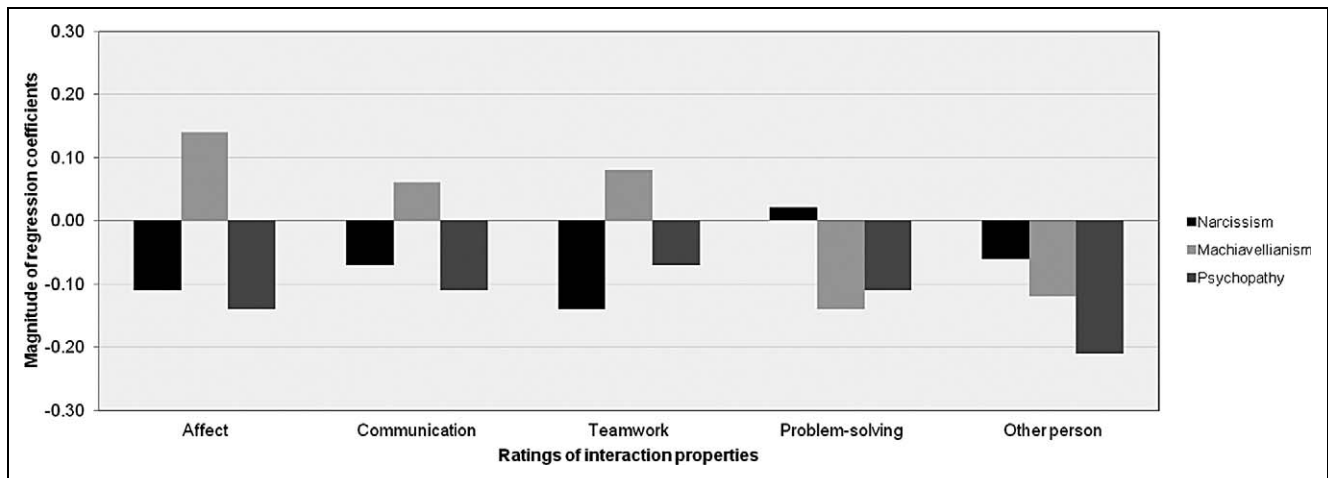
Figure 5. How others see interaction properties when interacting with dark personalities. Bars represent the magnitudes of disattenuated β regression coefficients. Coefficients above |.21| are significant at $p < .05$.

Table 2. Profile Similarities for Dark Triad Pairs

	N-M	N-P	M-P
Trait ratings[a]			
How dark personalities see themselves	−.23	.63†	−.54
How dark personalities see others	−.22	.51	−.49
How dark personalities are seen by others	−.46	.68*	−.60†
Interaction properties ratings[b]			
How dark personalities see properties of the interaction	−.66	.80	−.12
How others see properties of the interaction with dark personalities	.82†	.22	.43

N = narcissism; M = Machiavellianism; P = psychopathy.
[a] $n = 10$. [b] $n = 5$.
*$p < .05$. †$p < .10$.

Table 3. Synopsis of Findings

	Findings			Conclusions	
Questions	Narcissists	Machiavellians	Psychopaths	Convergence?	Odd one out?
Trait ratings					
Self-ratings: How do dark personalities see themselves?	Largely positive	Largely negative	Positive and negative	No	All different
Ratings of others: How do dark personalities see others?	Neutral	Largely negative	Neutral	No	Machiavellianism
Ratings by others: How are dark personalities seen by others?	Neutral	Largely negative	Largely negative	No	Narcissism
Properties of interaction ratings					
Ratings of interaction properties from self-view: How do dark personalities see communicating with others?	Neutral	Largely negative	Neutral	No	Machiavellianism
Ratings of interaction properties from partners: How do others see communicating with dark personalities?	Neutral	Negative tendency	Negative tendency	No	Narcissism

self-ratings and ratings of others seem quite similar. This can be explained in two ways. First, Machiavellians' negative other-models (Jones & Paulhus, 2009) could be complemented by negative self-models in global misanthropic views ("all people are bad—including me"). Indeed, Machiavellian cool detachment and pragmatic tough-mindedness entails a cynical worldview (Christie & Geis, 1970). Second, Machiavellians may either (illusorily) project their personalities onto others or possess evocative tendencies that elicit reactions of others similar to how they behave themselves (e.g., making others behave cold because oneself is behaving cold). Machiavellians' negative other-models could be somehow behaviorally manifest (e.g., in cold behavior) and thus evoke negative reactions from others (e.g., being judged less favorably).

Psychopathy. Psychopaths were described (accurately) as high on Dominance and low on Nurturance, Ingenuousness, and Conscientiousness. As with narcissists, this had no adverse effects on properties of the interaction as perceived by interaction partners, but psychopaths were seen negatively by others and were less liked. Psychopathy thus does not seem detrimental to the communication and working atmosphere in short-term interactions but only to likeability. It has been found that particularly Machiavellianism and psychopathy inhabit virtually identical spots within Quadrant II of the interpersonal circumplex (Jones & Paulhus, 2010). This was not supported; if anything, narcissism and psychopathy converged.

Unificationist versus discrimination perspective. Neither a radically formulated unificationist ("the Dark Triad traits converge to a single dark factor") nor a discrimination perspective ("the Dark Triad traits form separate domains") seems plausible. Rather, narcissism, Machiavellianism, and psychopathy may be tied together in some respects while not in others. It should thus be a goal of research on the Dark Triad to identify whether, when (i.e., in which contexts), where (i.e., through which facets or behaviors of the Dark Triad), to what extent, and why (i.e., due to which underlying processes) the Dark Triad traits show overlap or nonoverlap.

In the current study, intercorrelations between the Dark Triad traits were at best modest and certainly do not support a unificationist perspective. Also, narcissists, Machiavellians, and psychopaths show differing self-views and are differently perceived. As evident in Table 3, there were barely consistent convergences for the Dark Triad—there was almost always an odd one out. Particularly, Machiavellians perceived themselves differently and were differently perceived, probably because they evoke different responses from others. Thus, different social consequences ensue. The current study hence stands in support of a discrimination perspective on the Dark Triad traits: they should be distinguished when investigating processes of initial, short-term social interactions.

Limitations and Prospects

The current study compared for the first time the respective social consequences of narcissism, Machiavellianism, and

psychopathy at once in a naturalistic setting. However, there are some limitations that future studies should address. First, neither subfacets nor different "forms" of each Dark Triad trait were investigated. For example, grandiose versus vulnerable narcissism (Miller et al., 2011) and primary versus secondary psychopathy (Hare, 2003) can be distinguished. Also, Machiavellianism likely has subfacets despite being often unidimensionally conceptualized (Rauthmann & Will, 2011). This goes hand in hand that more elaborate measures of the Dark Triad be devised to assess different subfacets and forms.

Second, the context within which interactions occur and personality unfolds is important. The current study used a game that imposes a cooperation situation, but also other contexts are possible (e.g., friendship, mating, performance and achievement, job interview, etc.). Besides content and function of social situations, acquaintance, and interaction time may be moderators due to quantity and quality of personality-relevant information available (Funder, 1999). Also, it is not clear *at which point* and *why exactly* perceptions of dark personalities turn unfavorable. Future studies should thus systematically investigate Trait × Context × Acquaintance interactions to elucidate the generalizability of current findings.

Third, round-robin designs should be employed so that perceiver/actor, target/partner, relationship, and error variance components and effects can be estimated in Social Relations model (SRM) analyses (Kenny, 1994). In the current dyadic design, these effects could not be distinguished. SRM analyses could further disentangle differences between Dark Triad traits and be particularly useful to tease apart projection phenomena (e.g., whether Machiavellians project their self-views onto others or whether they really make others similar to themselves while interacting with them). For example, it could be investigated whether assumed similarity or evocative tendencies account for similarities in self-ratings and ratings of others by using state and trait versions of instruments and measuring at multiple occasions.

Fourth, it should be investigated with Brunswikian lens model analyses which behaviors *exactly* account for others' perceptions of dark personalities. While there is already evidence for behavioral manifestations of narcissism (e.g., Holtzman, Vazire, & Mehl, 2010), findings on psychopathy (for an exception, see Fowler et al., 2009) and Machiavellianism are scant.

Fifth, it could also be examined how dark personalities see themselves *in relation to* others and to what extent self-enhancement tendencies occur (Paulhus & Williams, 2002). For example, it can be checked whether (a) dark personalities see themselves more favorably than they see others and/or (b) others see dark personalities less favorably than dark personalities see themselves, while (c) objective criteria (e.g., intelligence) are also assessed as benchmarks. Data from such a design could also be analyzed with variance decomposition (Kwan, John, Kenny, Bond, & Robins, 2004).

To sum up, findings of the current study should be replicated, corroborated, and extended (a) in more diverse samples (e.g., better female–male ratio, nonclinical vs. clinical samples,

different age ranges), (b) with different Dark Triad measures, (c) at different levels of acquaintance (and possibly also experimentally varying the quality and quantity of personality-relevant information available), (d) under different circumstances or environmental contexts with different tasks (e.g., real-life friendship bonds, assessment center), and (e) with different research designs (e.g., round-robin).

Conclusion

Narcissists, Machiavellians, and psychopaths frequently behave in an antagonistic manner in interpersonal relations, and it has been proposed that they are virtually identical. If the overlap among Dark Triad traits is strong, then they should share correlates. However, the current study demonstrated that dark personalities do not uniformly entail similar social outcomes. Findings add to the literature emphasizing the Dark *Triad*, not the Dark *One*: narcissism, Machiavellianism, and psychopathy should be distinguished and considered three separate traits in their own right—at least when it comes to studying how they play out in early processes of acquaintance and short-term, cooperative social interactions.

Notes

1. The terms "dark personalities," "narcissists," "Machiavellians," and "psychopaths" are *not* used as diagnostic labels, but as abbreviations *only* for people scoring (highly) on respective personality dimensions. Further, no pathology is implied; the terms are *solely* used for subclinical forms of the respective personality dimensions.
2. Disattenuated bivariate zero-order Pearson correlation coefficients (Supplementary Tables 1 and 2) as well as disattenuated β regression coefficients (Supplementary Tables 3 and 4, upon which Figures 1–5 are based) among the Dark Triad with all trait scales and interaction properties items can be found in the online supplemental material at http://spps.sagepub.com/supplemental.

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