



## The perceived attractiveness and traits of the Dark Triad: Narcissists are perceived as hot, Machiavellians and psychopaths not

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### ARTICLE INFO

#### Article history:

Received 24 July 2012

Received in revised form 6 November 2012

Accepted 8 November 2012

Available online 8 December 2012

#### Keywords:

Dark Triad

Narcissism

Machiavellianism

Psychopathy

Social perception

Personality judgment

Attractiveness

Attraction

### ABSTRACT

The current work investigated how a fictitious opposite-sex narcissist, Machiavellian, and psychopath are perceived in an experimental between subjects-design with three groups (total  $N = 184$ ). Participants rated personality traits (Big Five and Agency/Communion) and different domains of interpersonal attraction (likeability, attractiveness, friend value, short-term mate value, long-term mate value) of the target persons. While all three target persons were not perceived particularly favorably by participants, the narcissist was consistently perceived more favorably than the Machiavellian and the psychopath who were perceived quite similarly to each other. It is discussed why narcissists may be judged more favorably and Machiavellians and psychopaths converge in people's lay perceptions.

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### 1. Introduction

Although individuals with high levels on the "Dark Triad"<sup>1</sup> (Paulhus & Williams, 2002) – the sub-clinical traits narcissism, Machiavellianism, and psychopathy – "get ahead" with self-beneficial and manipulative exploitation, their antagonistic behavioral style goes at the expense of "getting along": They frequently entail toxic and destructive trajectories (e.g., game-playing, social pain, fraud, delinquency; Jonason & Schmitt, 2012; Jones & Paulhus, 2010; Paulhus & Williams, 2002). Yet, driven "go-getter" people that do what it takes to climb the ladder in life may seem attractive despite their downsides which may leak out more and more after prolonged interactions (e.g., Campbell & Campbell, 2009; Paulhus, 1998). Popular literature and media is full of "anti-heroes" and "bad boys" who seem quite appealing and are worshipped (Jonason, Webster, Schmitt, Li, & Crysel, 2012). But how exactly are narcissists, Machiavellians, and psychopaths judged by people? The current work examines with an experimental design to what extent

opposite-sex "dark personalities" are appealing (i.e., likeable and attractive) and how they are judged in their personality traits of the Big Five and Agency/Communion.

#### 1.1. The Dark Triad

*Narcissists* show (a) self-aggrandization, (b) seeking of attention and admiration, (c) vanity, (d) exhibitionism, (e) arrogance, (f) proneness towards power, prestige, status, and leadership, and (g) feelings of superiority and entitlement (Morf & Rhodewalt, 1993, 2001; Raskin & Hall, 1979; Raskin & Terry, 1988). *Machiavellians* show (a) cynical, pragmatic, cold, and misanthropic beliefs, (b) callous emotional detachment, (c) striving for agentic goals (money, power, and status), and (d) calculating, duplicitous, and exploitative manipulation tactics (Christie & Geis, 1970; Fehr, Samsom, & Paulhus, 1992; Jones & Paulhus, 2009; Rauthmann, 2012a; Rauthmann & Will, 2011; Wilson, Near, & Miller, 1996). *Psychopaths* show (a) cold affect, (b) interpersonal manipulation, (c) impulsivity and thrill-seeking, and (d) anti-social behaviors (Hare, 1985, 1991, 2003; Lilienfeld & Andrews, 1996; Salekin, Leistico, & Mullins-Nelson, 2006; Williams, Nathanson, & Paulhus, 2003).

The moderately intercorrelated Dark Triad share similar (a) conceptualizations (e.g., focus on malevolence), (b) correlates (e.g., low agreeableness), (c) phenotypical behaviors (e.g., manipulation), and (d) trajectories (e.g., success in short-term mating) (Jonason, Li, Webster, & Schmitt, 2009; Jones & Paulhus, 2010; Paulhus &

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<sup>1</sup> The terms "dark person(ality)", "narcissist", "Machiavellian", and "psychopath" are not used as diagnostic or clinical terms that are indicative of a categorization, but only as abbreviations for people who score relatively high on respective scales of these traits.

Williams, 2002). These similarities among the Dark Triad traits may reflect an underlying fast life strategy (Jonason et al., 2012). Moreover, narcissism, Machiavellianism, and psychopathy are sometimes seen as only nuances of one underlying general dark personality factor and hence virtually indistinguishable (e.g., Jonason, Li, & Buss, 2010; Jonason & Webster, 2010; Lilienfeld & Andrews, 1996; McHoskey, 1995, 2001; McHoskey, Worzel, & Szyarto, 1998) despite the fact that they also exhibit many differences (see, e.g., Jones & Paulhus, 2010; Petrides, Vernon, Schermer, & Veselka, 2011; Rauthmann, 2011, 2012b; Vernon, Villani, Vickers, & Harris, 2008). Examining whether people judge narcissists, Machiavellians, and psychopaths differently can elucidate to what extent lay people converge dark personalities in their social perceptions: Are they all the same or are there differences between (perceptions of) narcissists, Machiavellians, and psychopaths?

### 1.2. Personality perceptions of dark personalities

According to Jones and Paulhus (2010), “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). However, there are probably differences in how narcissists, Machiavellians, and psychopaths are judged although interpersonal perception studies on the full Dark Triad (not only one member) are scarce (cf. Rauthmann, 2012b). This makes it difficult to examine unique personality profiles of narcissists, Machiavellians, and psychopaths. Moreover, peer-reports are seldom used to further validate dark personalities’ self-views. For example, Rauthmann (2012b) found in a naturalistic setting that dark personalities were perceived as disagreeable and somewhat agentic. The current study examines perceptions of narcissists, Machiavellians, and psychopaths with an experimental design to elucidate more stringently and systematically how they are perceived in appeal and personality traits. Based on the literature examining associations among the Dark Triad and personality (Jakobwitz & Egan, 2006; Jones & Paulhus, 2010; Paulhus & Williams, 2002; Rauthmann, 2012b) and the literature outlined above, we hypothesized that a narcissist would be perceived more favorably regarding personality (e.g., more agreeableness and conscientiousness) and thus differently than a Machiavellian and psychopath on personality dimensions, whereas the latter two would be perceived similarly or virtually identically.

### 1.3. Attractiveness of dark personalities

Narcissists have been found to be (a) popular and attractive (Back, Schmukle, & Egloff, 2010; Campbell & Campbell, 2009; Küfner, Nestler, & Back, in press), (b) attain status (Brunell et al., 2008; Deluga, 1997; Young & Pinsky, 2006), and (c) have success in short-term mating (Holtzman & Strube, 2010, 2011; Jonason, Valentine, Li, & Harbeson, 2011; Jonason et al., 2009). This suggests that they could be somewhat desirable as friends and mates. Machiavellians show cold, aloof, and misanthropic behavior (Christie & Geis, 1970; Rauthmann & Will, 2011) and psychopaths callousness, an erratic lifestyle, and anti-social behaviors (Hare, 2003), which should make them undesirable to others as friends and mates. Machiavellianism and psychopathy are additionally believed to be virtually identical traits (e.g., Lilienfeld & Andrews, 1996; McHoskey, 1995, 2001; McHoskey et al., 1998). This suggests that they have similar negative effects on liking and attraction at initial stages of acquaintanceship. Based on the study of Rauthmann and Kolar (2012) as well as the literature outlined above, we hypothesized that a narcissist would be seen as more appealing, likeable, and attractive than a Machiavellian and a psychopath, whereas the latter two would be perceived similarly or virtually identically.

## 2. The current work

Do narcissists, Machiavellians, and psychopaths differ in how they are perceived by others regarding their personalities and likeability/attractiveness? This question is important for different reasons. First, misguided relationship choices may be explained. Relationship choice – who to date, mate, and relate with – is a fundamental choice with many consequences: A vibrant, driven, captivating, and “complex” person may seem interesting at first sight (see Back et al., 2010), but in the long haul such persons might not live up to what is expected from them, particularly in committed long-term relationships (e.g., Campbell & Campbell, 2009). Thus, what seemed initially a good choice may later turn out to be a bad choice with many negative consequences (e.g., social pain, grief, low relationship satisfaction). Second, Rauthmann and Kolar (2012) investigated people’s perceptions of narcissism, Machiavellianism, and psychopathy as traits and found that narcissism was judged differently than Machiavellianism and psychopathy. The former was judged more positively than the latter two which were judged quite similarly as unfavorable. However, it remains unclear how people with dark traits (not dark traits per se) are perceived. People’s social cognition may drive their behavior, and a positive view of dark personalities could explain why they are successful in short-term mating (e.g., Jonason et al., 2009) and other contexts (e.g., Deluga, 1997).

## 3. Methods

### 3.1. Participants

Students from an undergraduate psychology seminar were instructed to gather data on at least 10 non-university people (five women, five men). The acquired participants did not receive any form of compensation. Data from  $N = 201$  participants (95 female, 90 male; 16 unidentified; mean age = 23.78 years,  $SD = 5.77$ , range: 17–54) were obtained on paper–pencil measures. Because of missing values,  $N = 184$  (95 women, 89 men) remained for multivariate analyses.

### 3.2. Procedure

To clearly investigate perceptions of narcissists, Machiavellians, and psychopaths, an experimental design was employed varying a fictitious opposite-sex target person’s trait. In the first condition ( $n = 60$ ) participants obtained information about a bogus opposite-sex person scoring highly on four items of a narcissism scale (i.e., 3 and 4 on a scale ranging from 0 to 4), in the second condition ( $n = 64$ ) about someone scoring highly on four items of a Machiavellianism scale, and in the third condition ( $n = 60$ ) about someone scoring highly on four items of a psychopathy scale. Participants then indicated their liking/attraction for the bogus persons and rated their personality on the Big Five and Agency/Communion. The vignette scales were derived from Jonason and Webster’s (2010) Dirty Dozen (narcissism: e.g., I tend to want others to admire me; Machiavellianism: e.g., I tend to manipulate others to get my way; psychopathy: e.g., I tend to lack remorse). Perceptions can thus be investigated as a function of the manipulated trait vignette.

### 3.3. Measures

The vignette person’s likeability (“How likeable is this person?”), friend value (“How much would you like this person as a platonic friend?”), attractiveness (“How attractive do you find this person?”), short-term mate value (“How much would you like this

**Table 1**  
Descriptive statistics of personality and attractiveness ratings for the narcissistic, Machiavellian, and psychopathic vignette person.

Judgment criteria	Narcissist		Machiavellian		Psychopath	
	M	SD	M	SD	M	SD
<i>Personality ratings</i>						
Neuroticism	2.25	0.97	1.28	0.87	0.83	0.66
Extraversion	2.92	0.70	2.77	0.76	2.46	0.77
Openness	1.84	0.78	1.75	0.92	1.58	0.71
Agreeableness	1.49	0.73	1.18	0.68	1.08	0.66
Conscientiousness	2.49	0.70	2.12	0.84	2.21	0.85
Agency	2.55	0.42	2.61	0.44	2.44	0.49
Communion	1.41	0.65	0.88	0.57	0.94	0.71
<i>Attractiveness ratings</i>						
Likeability	1.80	0.89	0.91	0.72	1.20	1.02
Friend value	1.66	0.96	0.78	0.93	1.08	1.18
Attractiveness	1.92	1.00	1.29	1.07	1.02	1.02
Short-term mate value	2.42	1.28	2.05	1.23	1.48	1.37
Long-term mate value	1.03	0.95	0.40	0.79	0.48	1.02

Note.  $N = 184$ .

person for a short-term sexual affair?”), and long-term mate value (“How much would you like this person for a long-term committed relationship?”) were to be answered on a five-point Likert-type scale (0 “not at all” to 4 “totally”). Additionally, the Big Five (BFI-S, 15 items; Schupp & Gerlitz, 2008) and Agency/Communion (20 items; Gebauer, Paulhus, & Neberich, *in press*) of the bogus person were rated on a five-point Likert-type scale (0 “not at all” to 4 “totally”).

## 4. Results

### 4.1. Personality ratings

Descriptive statistics for personality ratings, broken down for condition (bogus narcissist vs. Machiavellian vs. psychopath), can be found in Table 1. A one-way multivariate analysis of variance (MANOVA) with the bogus person’s Big Five, Agency, and Communion, rated by participants, as dependent variables ( $r_s = |.01|-.52$ ) and condition (bogus narcissist vs. Machiavellian vs. psychopath) as a fixed between-subjects factor was computed.<sup>2</sup> There was a significant overall-effect of condition on people’s ratings (omnibus  $F(7, 175) = 7.90$ ,  $p < .001$ , partial  $\eta^2 = .24$ ). Specifically, condition had an effect only on ratings of neuroticism, extraversion, agreeableness, conscientiousness, and communion ( $F_s = 3.63-44.48$ ,  $p_s \leq .028$ , partial  $\eta^2_s = .04-.33$ ). Multiple pairwise comparisons with Bonferroni correction were used as post hoc tests. The narcissist was judged as more neurotic, agreeable, and communal than both the Machiavellian and psychopath, more extraverted than the psychopath, and more conscientious than the Machiavellian. Thus, the narcissist was judged tendentially more favorably (except for neuroticism judgments). Machiavellians and psychopaths were judged quite similarly, with the sole exception of the Machiavellian being judged more neurotic than the psychopath. Thus, differences were mostly driven by the narcissist being perceived differently from the Machiavellian and psychopath.

### 4.2. Attractiveness ratings

Descriptive statistics for interpersonal attraction/liking ratings, broken down for condition (bogus narcissist vs. Machiavellian vs. psychopath), can be found in Table 1. The narcissist, Machiavellian,

and psychopath were not judged particularly favorably with the values not exceeding the middle point (2.00) of the response scale (with the exception of short-term mate value for the narcissist and the Machiavellian). A one-way multivariate analysis of variance (MANOVA) with the bogus person’s likeability, friend value, attractiveness, short-term mate value, and long-term mate value, rated by participants, as dependent variables ( $r_s = .29-.66$ ,  $p_s < .001$ ) and condition (bogus narcissist vs. Machiavellian vs. psychopath) as a fixed between-subjects factor was computed.<sup>2</sup> There was a significant overall-effect of condition on people’s ratings (omnibus  $F(10, 356) = 5.19$ ,  $p < .001$ , partial  $\eta^2 = .13$ ). Specifically, condition had an effect on all five ratings ( $F_s = 7.99-16.17$ ,  $p_s < .001$ , partial  $\eta^2_s = .08-.15$ ). Multiple pairwise comparisons with Bonferroni correction were used as post hoc tests. The general pattern was that the narcissist was perceived significantly more favorably than the Machiavellian and the psychopath, while the latter two were perceived similarly.

## 5. Discussion

Overall, the vignette narcissist, Machiavellian, and psychopath were not perceived as particularly appealing people, but the narcissist was judged – relative to the Machiavellian and psychopath – as more appealing. The Machiavellian and the psychopath were judged almost identically. Our hypotheses were thus largely supported.

### 5.1. Narcissism

Why are narcissists more appealing? In Western, more individualistic countries some narcissistic behaviors (e.g., charmingness, agency, leadership, boldness) may be even desired and not have a negative feel to them. Note that participants actually exactly read which items the bogus people strongly endorsed: Wanting to be admired, striving for prestige and status, and requesting special favors is something that many people want to some extent or the other, and people might not find those desires and behaviors particularly repulsive. Someone endorsing such items might be judged as more neurotic because he/she could be more vigilant towards other people’s cues and own status. One might also come to know people endorsing such items as being agentic (Rauthmann, 2012b), charming, stylish, and flashy (Back et al., 2010), physically attractive (Holtzman & Strube, 2010, 2011), and prone to or adept at short-term mating (Jonason et al., 2009) so that they seem attractive. Thus, narcissistic tendencies are evaluated as “lighter” in people’s perceptions than those of Machiavellians and psychopaths. It should be kept in mind, however, that narcissism, Machiavellianism, and psychopathy rarely occur in isolation because they share a positive manifold (Paulhus & Williams, 2002). This means that a “pure” narcissist is judged relatively to a “pure” Machiavellian and psychopath more favorably, but people’s perceptions of a person with narcissistic tendencies ought to become more unfavorable once Machiavellian and psychopathic streaks are also apparent.

### 5.2. Machiavellianism and psychopathy

Why are Machiavellians and psychopaths judged as rather unappealing? People may not like manipulative, duplicitous, callous, cynical, and remorseless people such as Machiavellians and psychopaths. Manipulative strategies of social conduct may confer some short-term benefits, but, as Wilson et al. (1996) argue, do not consistently lead to real-world success (one instance being judged negatively by others and having a bad reputation) (cf. Jonason & Webster, 2012). Rather, they can be considered a “defect strategy” of evolutionary game theory, which is successful in a certain set of

<sup>2</sup> Including sex as second between-subjects factor in an analogous two-way MANOVA or as a covariate in an analogous MANCOVA did not change the pattern of results because sex of participants did not exact any meaningful effects.

situations but comes with disadvantages in others. The convergence of psychopathy with Machiavellianism can be explained by the fact that they seem to inhabit virtually identical spots within the interpersonal circumplex (Jones & Paulhus, 2010); their antagonistic behavioral style (Fehr et al., 1992) may evoke similar responses in others. Second, it has been suggested that they are at either different spots on the same underlying trait continuum or even the same (e.g., Lilienfeld & Andrews, 1996; McHoskey, 1995, 2001; McHoskey et al., 1998). They may be tied together by callousness and exploitation – two core concepts in both (e.g., Hare, 2003; Jones & Paulhus, 2009). Indeed, it may seem that Machiavellianism and psychopathy form a “Malicious Two”, as these traits are uniquely related to stronger malevolence and negative perceptions from others as compared to narcissism which is perceived as “brighter.” This pattern of findings nicely dovetails with the findings of Rauthmann and Kolar (2012). However, the concept of a “Malicious Two” would have to be examined in future studies because our findings are limited to lay people’s social perceptions of bogus vignettes.

### 5.3. Limitations and prospects

The current work investigated for the first time with an experimental between-subjects design how a vignette narcissist, Machiavellian, and psychopath were judged on personality traits and attractiveness. There are some limitations that could be addressed by future research. First, we did not include different forms of the Dark Triad traits (e.g., grandiose vs. vulnerable; Miller et al., 2010) nor facets within each member. For example, different facets within narcissism are differentially related to (un-)popularity (Küfner et al., in press) which could rely on different perceptions. Second, the short-scale Dirty Dozen by Jonason and Webster (2010) has been used to construct the bogus person vignettes, but its validity has been questioned (Miller et al., in press). Of course, the very convenient brevity of such a scale comes with decrements in (content) validity. Thus, the current pattern of findings should be replicated with other Dark Triad scales (such as NPI, MACH, SRP). Third, process-focused modeling (e.g., mediation analysis, time-series analysis, path modeling) can be used in experimental and longitudinal data to examine whether attraction leads to certain personality ratings or personality ratings to attraction. The relation and interplay between attraction and personality ratings could not be addressed with our cross-sectional data. Fourth, we did not construct vignette persons low or neutral on the Dark Triad traits and thus could only compare social perceptions among high Dark Triad standings. Future studies should also incorporate other conditions as a baseline so that comparisons can be drawn between the Dark Triad members (as done here) and within each member.

## 6. Conclusion

The current experimental study found that a narcissist was perceived, at large, more favorably than a Machiavellian and psychopath in personality traits and attractiveness. This speaks to the notion that at least narcissism is distinguishable in lay people’s social perceptions. A Machiavellian and psychopath were perceived quite similarly, alluding to the notion that they are clustered together in people’s judgments. In short: Narcissists are perceived as hot, Machiavellians and psychopaths not.

## References

Back, M. D., Schmukle, S. C., & Egloff, B. (2010). Why are narcissists so charming at first sight? Decoding the narcissism-popularity link at zero acquaintance. *Journal of Personality and Social Psychology*, 98, 132–145.

- Brunell, A. B., Gentry, W. A., Campbell, W. K., Hoffman, B. J., Kuhnert, K. W., & DeMarree, K. G. (2008). Leader emergence. The case of the narcissistic leader. *Personality and Social Psychology Bulletin*, 34, 1663–1676.
- Campbell, W. K., & Campbell, S. M. (2009). On the self-regulatory dynamics created by the peculiar benefits and costs of narcissism: A contextual reinforcement model and examination of leadership. *Self & Identity*, 8, 214–232.
- Christie, R., & Geis, F. (1970). *Studies in Machiavellianism*. New York: Academic Press.
- Deluga, R. J. (1997). Relationship among American Presidential charismatic leadership, narcissism, and rated performance. *Leadership Quarterly*, 8, 49–65.
- Fehr, B., Samsom, D., & Paulhus, D. L. (1992). The construct of Machiavellianism: Twenty years later. In C. D. Spielberger & J. N. Butcher (Eds.), *Advances in personality assessment* (Vol. 9, pp. 77–116). Hillsdale, NJ: Erlbaum.
- Gebauer, J. E., Paulhus, D. L., & Neberich, W. (in press). Big Two personality and religiosity across cultures: Communsals as religious conformists and agentics as religious contrarians. *Social Psychological and Personality Science*.
- Hare, R. D. (1985). Comparison of procedures for the assessment of psychopathy. *Journal of Consulting and Clinical Psychology*, 53, 7–16.
- Hare, R. D. (1991). *The Hare psychopathy checklist – Revised*. Toronto: Multi-Health Systems.
- Hare, R. D. (2003). *The Hare psychopathy checklist – Revised* (2nd ed.). Toronto: Multi-Health Systems.
- Holtzman, N. S., & Strube, M. J. (2010). Narcissism and attractiveness. *Journal of Research in Personality*, 44, 133–136.
- Holtzman, N. S., & Strube, M. J. (2011). The intertwined evolution of narcissism and short-term mating: An emerging hypothesis. In W. K. Campbell & J. D. Miller (Eds.), *The handbook of narcissism and narcissistic personality disorder: Theoretical approaches, empirical findings, and treatments* (pp. 210–220). Hoboken, NJ: Wiley.
- Jakobwitz, S., & Egan, V. (2006). The dark triad and normal personality. *Personality and Individual Differences*, 40, 331–339.
- Jonason, P. K., Li, N. P., & Buss, D. M. (2010). The costs and benefits of the Dark Triad: Implications for mate poaching and mate retention tactics. *Personality and Individual Differences*, 48, 373–378.
- Jonason, P. K., Li, N. P., Webster, G. D., & Schmitt, D. P. (2009). The Dark Triad: Facilitating short-term mating in men. *European Journal of Personality*, 23, 5–18.
- Jonason, P. K., & Schmitt, D. P. (2012). What have you done for me lately?: Friendship-selection in the shadows of Dark Triad traits. *Evolutionary Psychology*, 10, 400–421.
- Jonason, P. K., Valentine, K. A., Li, N. P., & Harbeson, C. L. (2011). Mate-selection and the Dark Triad: Facilitating a short-term mating strategy and creating a volatile environment. *Personality and Individual Differences*, 51, 759–763.
- Jonason, P. K., & Webster, G. D. (2010). The Dirty Dozen: A concise measure of the Dark Triad. *Psychological Assessment*, 22, 420–432.
- Jonason, P. K., & Webster, G. D. (2012). A protean approach to social influence. Dark Triad personalities and social influence tactics. *Personality and Individual Differences*, 52, 521–526.
- Jonason, P. K., Webster, G. D., Schmitt, D. P., Li, N. P., & Crysel, L. (2012). The antihero in popular culture: A life history theory of the Dark Triad. *Review of General Psychology*, 16, 192–199.
- Jones, D. N., & Paulhus, D. L. (2010). Differentiating the Dark Triad within the interpersonal circumplex. In L. M. Horowitz & S. N. Strack (Eds.), *Handbook of interpersonal theory and research* (pp. 249–267). New York: Guilford.
- Jones, D. N., & Paulhus, D. L. (2009). Machiavellianism. In M. R. Leary & R. H. Doyle (Eds.), *Handbook of individual differences in social behavior* (pp. 93–108). New York: Guilford.
- Küfner, A., Nestler, S., & Back, M. D. (in press). The two pathways to being an (un-)popular narcissist. *Journal of Personality*.
- Lilienfeld, S. O., & Andrews, B. P. (1996). Development and preliminary validation of a self-report measure of psychopathic personality traits in non-criminal populations. *Journal of Personality Assessment*, 66, 488–524.
- McHoskey, J. W. (1995). Narcissism and Machiavellianism. *Psychological Reports*, 77, 755–759.
- McHoskey, J. W. (2001). Machiavellianism and personality dysfunction. *Personality and Individual Differences*, 31, 791–798.
- McHoskey, J. W., Worzel, W., & Szyarto, C. (1998). Machiavellianism and psychopathy. *Journal of Personality and Social Psychology*, 74, 192–210.
- Miller, J. D., Dir, A., Gentile, B., Wilson, L., Pryor, L. R., & Campbell, W. K. (2010). Searching for a vulnerable dark triad: Comparing factor 2 psychopathy, vulnerable narcissism, and borderline personality disorder. *Journal of Personality*, 78, 1529–1564.
- Miller, J. D., Few, L. R., Seibert, L. A., Watts, A., Zeichner, A., & Lynam, D. R. (in press). An examination of the Dirty Dozen measure of psychopathy: A cautionary tale about the costs of brief measures. *Psychological Assessment*.
- Morf, C. C., & Rhodewalt, F. (1993). Narcissism and self-evaluation maintenance. Explorations in object relations. *Personality and Social Psychology Bulletin*, 19, 668–676.
- Morf, C. C., & Rhodewalt, F. (2001). Unraveling the paradoxes of Narcissism: A dynamic self-regulatory processing model. *Psychological Inquiry*, 12, 177–196.
- Paulhus, D. L. (1998). Intrapersonal and intrapsychic adaptiveness of trait self-enhancement: A mixed blessing? *Journal of Personality and Social Psychology*, 75, 1197–1208.
- Paulhus, D. L., & Williams, K. M. (2002). The Dark Triad of personality: Narcissism, Machiavellianism, and psychopathy. *Journal of Research in Personality*, 36, 556–563.
- Petrides, K. V., Vernon, P. A., Schermer, J. A., & Veselka, L. (2011). Trait emotional intelligence and the dark triad traits of personality. *Twin Research and Human Genetics*, 14, 35–41.

- Raskin, R., & Terry, H. (1988). A principal-components analysis of the narcissistic personality inventory and further evidence of its construct validity. *Journal of Personality and Social Psychology*, 54, 890–902.
- Raskin, R. N., & Hall, C. S. (1979). A narcissistic personality inventory. *Psychological Reports*, 45, 590.
- Rauthmann, J. F. (2011). Acquisitive or protective self-presentation of dark personalities? Associations among the Dark Triad and self-monitoring. *Personality and Individual Differences*, 51, 502–508.
- Rauthmann, J. F. (2012a). Towards multifaceted Machiavellianism: Content, factorial, and construct validity of a German Machiavellianism Scale. *Personality and Individual Differences*, 52, 345–351.
- Rauthmann, J. F. (2012b). *The Dark Triad and interpersonal perception: Similarities and differences in the social consequences of narcissism, Machiavellianism, and psychopathy*. Social Psychological and Personality Science.
- Rauthmann, J. F., & Kolar, G. (2012). How “dark” are the Dark Triad traits? Examining the darkness of narcissism, Machiavellianism, and psychopathy. *Personality and Individual Differences*, 53, 884–889.
- Rauthmann, J. F., & Will, T. (2011). Proposing a multidimensional Machiavellianism conceptualization. *Social Behavior and Personality*, 39, 391–404.
- Salekin, R. T., Leistico, A.-M. R., & Mullins-Nelson, J. L. (2006). Psychopathy, empathy, and perspective-taking ability in a community sample: Implications for the successful psychopathy concept. *International Journal of Forensic Mental Health*, 5, 133–149.
- Schupp, J., & Gerlitz, J.-Y. (2008). BFI-S: Big Five Inventory-SOEP. In A. Glöckner-Rist (Ed.), *Zusammenstellung sozialwissenschaftlicher Items und Skalen [Compilation of scales and items for the social sciences]*. ZIS version 12.00. Bonn: GESIS.
- Vernon, P. A., Villani, V. C., Vickers, L. C., & Harris, J. A. (2008). A behavioral genetic investigation of the Dark Triad and the Big 5. *Personality and Individual Differences*, 44, 445–452.
- Williams, K. M., Nathanson, C., & Paulhus, D. L. 2003. Structure and Validity of the Self-Report Psychopathy Scale-III in normal populations. *Presentation at the 11th annual convention of the American Psychological Association*, Toronto, Canada.
- Wilson, D. S., Near, D., & Miller, R. R. (1996). Machiavellianism: A synthesis of the evolutionary and psychological literatures. *Psychological Bulletin*, 119, 285–299.
- Young, S. M., & Pinsky, D. (2006). Narcissism and celebrity. *Journal of Research in Personality*, 40, 463–471.