



# Personality and the perception of situations: The Big Five and Dark Triad traits



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## ABSTRACT

Individuals differ in how they perceive the world and these perceptions have important consequences in the world. Patterns in those perceptions may be correlated with individual differences in personality. In this study ( $N = 237$ ), we developed a unique, picture-based method to assess perceptions of situations—in this case a bar, a classroom, and an office—based on the situational eight DIAMONDS (i.e., Duty, Intellect, Adversity, Mating, pOSitivity, Negativity, Deception, Sociality) measure. We correlated personality traits with the perceptions in each location and aggregated across all situations. Replicating previous work, we found the Big Five traits (i.e., extraversion, neuroticism, openness, conscientiousness, and agreeableness) were linked to individual differences in perceptions. For instance, those who were neurotic saw danger in locations with no obvious threats. Unlike previous work, we also contrast these findings with those of the Dark Triad traits (i.e., narcissism, psychopathy, and Machiavellianism). Specifically, those high in the Dark Triad traits saw the same situations affording them mating and deception opportunities. We consider the possibility that (1) personality traits are associated with biased situational judgments but, also, that (2) biased perceptions might *lead to* the behavioral syndromes that reflect modern personality traits.

## 1. Introduction

How people perceive the world has major consequences for how they behave. Misattribution of sexual interest might result in sexual harassment (Li, Sng, & Jonason, 2012). Perceptions of adversity might lead one to avoid dangers but also engaging in fights (Dodge & Frame, 1982). In short, how one evaluates situations is logically related to how they behave in those situations. This is not to suggest that situations do not have objective qualities (e.g., temperature), which of course they do. However, there is a subjective element to the evaluation of situations (Rauthmann, Sherman, & Funder, 2015). Looking at the same situation may evoke evaluations that work needs to be accomplished or of the presence of opportunities to engage in social interactions (Rauthmann et al., 2014); evaluations that may be related to people's personality (Serfass & Sherman, 2013). In this study, we examine how personality traits may be associated with individual differences in situation perceptions. We attempt to replicate research focused on the Big Five traits (i.e., extraversion, neuroticism, openness, conscientiousness, and agreeableness; Donnellan, Oswald, Baird, & Lucas, 2006) and

extend that to include the Dark Triad traits (i.e., narcissism, psychopathy, and Machiavellianism; Paulhus & Williams, 2002).

There are, at least, two theoretical perspectives on the ways that personality traits may relate to individual differences in perceptions. Trait theory (Allport, 1937; McRae & Costa, 2008) proposes that underlying personality traits cause people to perceive situations in a particular way. That is traits are viewed as distal, upstream predictors of downstream outcomes. From this view, a trait like neuroticism causes people to see a given situation as more or less threatening than others. However, this position is limited for at least three reasons. First, perceptual systems may be similar to motivational (Jonason & Zeigler-Hill, 2018), hormonal (Dane, Jonason, & Walker, 2018), and emotional (Jonason, Lyons, Bethell, & Ross, 2013) systems, in that they are more fundamental than personality traits. Second, empirical research repeatedly indicates that personality traits are largely averages of behavioral indicators or syndromes (Buss & Craik, 1983; Epstein, 1979; Fleeson, 2001, 2007; Sherman, Rauthmann, Brown, Serfass, & Jones, 2015; Sih, Bell, Johnson, & Ziemba, 2004). Third, trait theory proposes that both seeing threats in the environment and acting anxiously in

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response are caused by the underlying trait of neuroticism, that is any link between the former is spurious.

Second, socioanalytic theory (Hogan, 1982) presents an alternative view of the causal order espoused by trait theory. Researchers relying on this perspective contend that biases in how people perceive the world are more logically the upstream causes of the behavioral regularities known as personality traits. In this way, personality traits are downstream consequences of more basic and general upstream processes like motivational systems or cognitive biases. In this view, it is overperceiving the probability of threats that causes someone to act anxiously in response. Further, repeatedly feeling, thinking, and acting anxiously over time yields the reputation for one as a neurotic. The critical difference here is that individual differences in perceptions cause the traits, rather than the reverse.

Underlying individual differences in the perceptions of situations may be people's willingness to tolerate errors of omission (i.e., missed opportunities; Type 2) and commission (i.e., mistaken actions; Type 1). Over the course of evolution, benefits have accrued to individuals for engaging in both and, as a result, both are part of the species-level repertoire (Haselton, Nettle, & Murray, 2015). Take Type 1 error and the classic example of how to react to a moving bush. If there is nothing there and an ancestral woman ran, she was safe and lost a few calories. But, if there was a lion there and she did not run, she would have lost her life thereby undermining—terminally—her reproductive fitness. Natural selection may have selected for biases in perceptions that we see as neuroticism (Jonason & Perilloux, 2012), in this case through perceptual tendencies to overperceive adversity, deception, and negativity in situations (i.e., “risk-colored glasses”) to help people avoid danger. That is, those who had such a neurotic perceptual bias would have had more reproductive fitness than those who did not, creating directional selection for evaluative biases that we now perceive to be neuroticism. In contrast, however, risk-taking has paid off evolutionarily as well (Wilson & Daly, 1985), if only negligibly, for some people and the result would have been selection for biases that enable this behavior in some members of the species. In particular, taking more risks may come with more mortality threats but provides increased reproductive fitness. As such, we would expect traits (i.e., the Dark Triad traits) linked to an opportunistic, short-term, and even exploitive mating style (Jonason, Girgis, & Milne-Home, 2017; Jonason, Li, Webster, & Schmitt, 2009) to be associated with seeing mating opportunities more than others (i.e., “sex-colored glasses”) but also more opportunities for deception as well. Indeed, those high in the Dark Triad traits prefer to live in the city because it is characterized by more opportunities for deception (Jonason, 2018). In addition, seeing the world in a positive light, with opportunities to socialize, and few chances for adversity may be essential to enable the social life of the extravert, thereby satisfying their addiction to social interactions. These biases will create approach tendencies which have been linked to extraversion, psychopathy, and narcissism (Jonason & Jackson, 2016; Smillie, Pickering, & Jackson, 2006). Alternatively, why are agreeable people so nice? Perhaps they are nice because they do not see the worst in others and, therefore, do not perceive the world as composed of lots of adversity. Engaging in openness may also be predicated on biased ways of perceiving the world, one of those is a limited view of adversity in the world. With limited adversity, one is free to engage in non-survival relevant behaviors like intellectual and artistic expressions. And last, conscientious people engage in a “safe” life, preferring order and cleanliness. They may be able to afford this because they view the world in a biased way that enable this by perceived few threats in the world. Importantly, given the Big Five traits are more heterogeneous in content than the Dark Triad traits, we expect a more varied pattern of correlations for the former than the latter. The Dark Triad traits may have been subject to strong directional selection (i.e., organizing them in a systematic way towards solving similar adaptive problems) whereas the Big Five traits may be the result of (modern) niche diversification, each trait allowing people to occupy different

socioecological and cultural niches.

In this study, we attempt to understand how personality traits may relate to different perceptions of situations. We develop a novel method for understanding situational perceptions which capitalizes on the development of a brief measure of individual differences in perceptions of situations (Rauthmann & Sherman, 2016) and correlate those perceptions with brief measures of the Big Five traits and the Dark Triad traits. In short, we replicate what is known about the associations between perceptions of situations and the Big Five traits (Serfass & Sherman, 2013) and extend that work to examine the Dark Triad traits as well.

## 2. Method

### 2.1. Participants and procedure

The sample (78% white/Caucasian) was composed of 237 (43% male; 38% not in a committed relationship) volunteers ( $M = 30.42$ ,  $SD = 9.91$ ) aged 18 to 69 years of age from various online social media platforms who completed a series of self-report measures.<sup>2</sup> Participants were informed of the nature of the study, provided consent via tick box, and, upon completion, were thanked and debriefed. The necessary sample size—to which we fell negligibly short—was determined based on power analysis for the average effect size in social and personality psychology ( $r \approx 0.20$ ; Richard, Bond Jr., & Stokes-Zoota, 2003) and guidelines ( $N \approx 250$ ) set for reducing estimation error in personality psychology (Schönbrodt & Perugini, 2013). This study was approved by the ethics committee at Western Sydney University (H10449). Data, R code used for analyses, and images used as stimuli are available at: [https://osf.io/cy2uf/?view\\_only=19bb0887809a4888a51fe79c75a57503](https://osf.io/cy2uf/?view_only=19bb0887809a4888a51fe79c75a57503).

### 2.2. Measures

We used the Short Dark Triad (Jones & Paulhus, 2014), which is a 27-item personality inventory (9 items on each dimension), measuring individual differences in Machiavellianism, narcissism, and psychopathy. Participants were asked to report their agreement (1 = *Strongly Disagree*; 5 = *Strongly Agree*) with statements measuring Machiavellianism (e.g., “Most people are suckers”), narcissism (e.g., “I am an average person”), and psychopathy (e.g., “I like to pick on losers”). Items were summed to create indexes of Machiavellianism (Cronbach's  $\alpha = 0.80$ ;  $M = 2.98$ ,  $SD = 0.72$ ), Narcissism ( $\alpha = 0.65$ ;  $M = 2.69$ ,  $SD = 0.55$ ), and Psychopathy ( $\alpha = 0.67$ ;  $M = 2.36$ ,  $SD = 0.58$ ).

We used the 20-item International Personality Item Pool (Donnellan et al., 2006) to measure individual differences in the Big Five traits. Participants were asked the degree to which they agreed (1 = *Strongly disagree*; 5 = *Strongly agree*) with statements referring to them such as: “Have a vivid imagination” (i.e., Openness), “Get chores done right away” (i.e., Conscientiousness), “Talk to a lot of different people at parties” (i.e., Extraversion), “Sympathize with others' feelings” (i.e., Agreeableness), and “Have frequent mood swings” (i.e., Neuroticism). Items were averaged to create composites of Openness ( $\alpha = 0.70$ ;  $M = 4.04$ ,  $SD = 0.70$ ), Conscientiousness ( $\alpha = 0.68$ ;  $M = 3.23$ ,  $SD = 0.81$ ), Extraversion ( $\alpha = 0.81$ ;  $M = 2.68$ ,  $SD = 0.89$ ), Agreeableness ( $\alpha = 0.81$ ;  $M = 3.80$ ,  $SD = 0.80$ ), and Neuroticism ( $\alpha = 0.74$ ;  $M = 3.05$ ,  $SD = 0.84$ ).

To measure individual differences in the perceptions of situations, we used the S8\* (Rauthmann & Sherman, 2016), a 24-item measure of the situational eight DIAMONDS (i.e., Duty, Intellect, Adversity, Mating, pOsitivity, Negativity, Deception, Sociality; see Rauthmann et al., 2014), with three items measuring each dimension. As stimulus situations, participants were presented with pictures of a bar, a classroom, and an office (deemed common locations for our target sample)

<sup>2</sup> We eliminated 25 people who did not complete the measures.

**Table 1**  
Descriptive statistics for perceptions of situations per context and overall.

Situation perceptions	Office			Bar			Classroom			Overall		
	Mean	SD	$\alpha$	Mean	SD	$\alpha$	Mean	SD	$\alpha$	Mean	SD	$\alpha$
Duty	4.39	0.72	0.82	1.95	0.91	0.82	4.12	0.84	0.79	3.49	0.51	0.66
Intellect	4.02	0.94	0.88	2.90	0.83	0.67	4.44	0.71	0.78	3.79	0.57	0.75
Adversity	2.02	0.98	0.91	1.64	0.85	0.87	1.48	0.73	0.83	1.71	0.70	0.89
Mating	2.14	0.90	0.71	3.58	0.87	0.76	2.40	1.00	0.74	2.71	0.68	0.77
pOstivity	2.34	0.74	0.77	3.69	0.79	0.84	2.15	0.78	0.83	2.73	0.48	0.68
Negativity	4.14	0.57	0.82	3.44	0.91	0.89	4.15	0.70	0.82	3.91	0.49	0.75
Deception	3.70	0.79	0.82	4.08	0.76	0.90	3.21	0.98	0.85	3.66	0.62	0.83
Sociality	4.05	0.64	0.65	4.29	0.67	0.77	2.86	1.10	0.83	3.73	0.55	0.72
Grand mean	3.35	0.79	0.80	3.20	0.82	0.82	3.10	0.86	0.81	3.22	0.58	0.44

Note. Cross-situational perceptions (on diagonal) were correlated ( $r_{\text{Mean}} = 0.24$ ) but cross-affordance perceptions (off diagonal) were uncorrelated ( $r_{\text{Mean}} = 0.06$ ).

that were randomized for order and each had men and women present (see OSF site). They were instructed to “Take a look at this picture and imagine you were there now. Use the scale below to evaluate it. The question is: how much do you agree (1 = *strongly disagree*; 5 = *strongly agree*) that the statements provided describe how you feel about the location.” Items for each dimension were averaged within each situation and further aggregated across the three situations to quantify both situation-specific and general perceptions (see Table 1). Within each situation, internal consistency ranged from 0.65 to 0.91 while at the aggregated (cross-situation) level they ranged from 0.66 to 0.89. More critically, there was evidence for cross-situational consistency in perceptions across the eight DIAMONDS dimensions: perceptions of the office and the bar correlated ( $r = 0.25$ ;  $SD = 0.17$ ), perceptions of the bar and classroom correlated ( $r = 0.16$ ;  $SD = 0.14$ ), and perceptions of the office and the classroom correlated ( $r = 0.30$ ;  $SD = 0.20$ ).

### 3. Results

In Table 2 we report the correlations between personality traits and perceptions of situations for each situation and aggregated across situations. While there were subtle differences in correlates of situation perceptions depending on the situation, there were also clear patterns that emerged across all situations. As such, we summarize here only the correlations for the aggregated perceptions. For the interested reader, the situation-specific associations are reported in Table 2. We reported correlations between the perceptions and the traits in the OSF site.

We begin by replicating the associations with perceptions and the Big Five traits. People scoring high on Extraversion rated situations as higher on Intellect, pOstivity, and Sociality, and lower on Adversity. People scoring high on Agreeableness rated situations as higher on Intellect and lower on Adversity. People scoring high on Conscientiousness rated situations as lower on Adversity, lower on Negativity, and lower on Deception. People scoring high on Neuroticism rated situations as higher on Adversity, Negativity, and Deception. People scoring high on Openness rated situations as lower on Adversity. Thus, we see that all the Big 5 personality traits are associated with having some distinctive differences in situation perceptions. Further, many of these associations seem conceptually sensible (e.g., Neuroticism with Negativity; Extraversion with pOstivity and Sociality) and are consistent with previous research on situation perceptions (Serfass & Sherman, 2013).

Second, we extend previous work by examining the associations with perceptions and the Dark Triad traits. People scoring high on Machiavellianism rated situations as higher on Mating, Deception, and Sociability. People scoring high on Narcissism rated situations as higher on Intellect, pOstivity, and Deception, and lower on Adversity. People scoring higher on Psychopathy rated situations as higher on Adversity, Mating, pOstivity, and Deception. Thus, a consistent theme is that people scoring high on the Dark Triad tended to view these situations as having more romantic potential (high Mating) and more

opportunistically (high Deception) than others.

### 4. Discussion

The goal of this study was to understand individual differences in the way people evaluate situations from a dispositional paradigm. First, we have largely replicated associations between the Big Five traits and individual differences in perceptions of situations (Serfass & Sherman, 2013). We found, for instance, that those high in neuroticism also tended to see situations that contained no obvious dangers as places that are ripe for exploitation and conflict. Having such a tendency may be part of an overly sensitive alarm system that biases people towards making safe choices in their lives. Similarly, each of the remaining Big Five traits appear to be associated with systematic ways of perceiving the world that make logical sense as well. For instance, people characterized by agreeableness and extraversion also had social approach perceptions (e.g., positivity likely nudges people to interact with others) and people characterized by conscientiousness and openness perceived the world as safe (e.g., limited adversity) and safety might be a fundamental requirement of preferring order in one's life and enjoying the “leisure” activities characterized by those high in openness. A belief that the world is safe—whether true or not—may nudge people away from engaging in and being concerned with survival tasks and move towards the aesthetic and the intellectual.

In stark contrast to the Big Five traits, the Dark Triad traits were far more similar in the perceptions associated with them. Those who had tendencies to read into situations mating and deception affordances were more Machiavellian, psychopathic, and narcissistic and psychopathy and narcissism were associated with seeing situations in a more positive way. Unlike the Big Five, selection pressures may have organized the Dark Triad traits by focusing them on solving similar adaptive goals like the active exploitation of others for immediate reproductive fitness (Jonason et al., 2009, 2013). Unlike neuroticism, which was also linked to perceptions of deception, it is likely that these traits are linked to the commission of deception (Baughman, Jonason, Lyons, & Vernon, 2014) whereas neuroticism is linked to the perception that they will be taken advantage. Seeing mating and deception opportunities everywhere along with approach biases may be part of why those who are characterized by these traits have such a nefarious reputation in society (Jonason, Webster, Schmitt, Li, & Crysel, 2012). That is, the Dark Triad traits may orient people towards avoiding missed opportunities (i.e., more Type 2 errors) whereas neuroticism orients people towards avoiding dangers (i.e., more Type 1 errors).

While it might be tempting to think that personality drives the way we perceive the world (Allport, 1937; McRae & Costa, 2008), we think a logically more coherent view is that the way we see the world is a part of who we are (i.e., our perceptions shape/are part of our personalities; Hogan, 1982). As we noted above, the idea that individual differences in perceptions of situations fails on several conceptual and theoretical concerns. Instead, we think perception—situational or not—is more a

**Table 2**  
Correlations between personality traits and situation perceptions in three contexts and overall.

Personality	Situation perceptions							
	Duty	Intellect	Adversity	Mating	pOsitivity	Negativity	Deception	Sociality
<b>Office</b>								
Machiavellianism	0.07	0.09	0.07	0.08	0.04	0.08	0.37**	0.08
Narcissism	0.02	0.07	-0.14*	0.07	0.19**	-0.11	0.07	0.15*
Psychopathy	-0.06	-0.02	0.15*	0.14*	0.07	0.02	0.26**	0.00
Extraversion	-0.10	0.06	-0.15*	-0.01	0.14*	0.00	-0.21**	0.15*
Agreeableness	0.04	0.15*	-0.10	-0.09	0.08	-0.09	-0.05	0.04
Conscientiousness	0.07	0.09	-0.15*	-0.09	-0.01	-0.09	-0.05	0.04
Neuroticism	-0.02	0.01	0.29**	0.09	-0.02	0.17**	0.14*	-0.02
Openness	0.07	0.03	-0.11	-0.09	0.01	-0.06	-0.02	0.13*
<b>Bar</b>								
Machiavellianism	0.12	-0.06	0.04	0.09	-0.05	0.06	0.25**	0.05
Narcissism	0.11	0.20**	-0.05	0.09	0.08	-0.01	0.10	0.09
Psychopathy	0.21**	0.06	0.23**	-0.01	-0.01	0.06	0.03	-0.08
Extraversion	0.01	0.17**	-0.16*	0.12	0.19**	-0.04	0.00	0.13*
Agreeableness	-0.21**	0.03	-0.14*	0.15*	0.06	-0.03	0.05	0.14*
Conscientiousness	-0.03	-0.09	-0.19**	-0.08	0.04	-0.11	-0.17**	0.02
Neuroticism	0.11	0.00	0.20**	-0.06	-0.15*	0.23**	0.06	-0.02
Openness	-0.16*	-0.06	-0.18**	-0.15*	-0.16*	-0.10	-0.07	-0.04
<b>Classroom</b>								
Machiavellianism	0.00	0.01	0.10	0.19**	-0.01	0.06	0.16*	0.09
Narcissism	0.03	0.00	-0.11	0.06	0.06	-0.04	0.12	0.01
Psychopathy	-0.09	-0.06	0.12	0.13*	0.19**	-0.08	0.14*	0.15*
Extraversion	0.11	0.12	-0.14*	-0.07	0.04	-0.02	-0.02	0.08
Agreeableness	0.14*	0.13*	-0.18**	-0.12	-0.08	0.14*	-0.06	-0.03
Conscientiousness	-0.01	0.00	-0.18**	-0.03	0.00	-0.02	-0.08	0.01
Neuroticism	-0.13*	-0.19**	0.22**	0.02	0.17**	0.01	0.15*	0.12
Openness	0.09	0.04	-0.19**	0.02	0.00	0.09	0.10	0.01
<b>Overall</b>								
Machiavellianism	0.10	0.03	0.08	0.17**	-0.01	0.10	0.34**	0.11
Narcissism	0.09	0.14*	-0.12	0.10	0.17**	-0.07	0.13*	0.10
Psychopathy	0.05	-0.01	0.21**	0.12	0.14*	0.01	0.20**	0.07
Extraversion	0.02	0.16*	-0.18**	0.02	0.20**	-0.04	-0.04	0.14*
Agreeableness	-0.03	0.15*	-0.16*	-0.03	0.03	0.05	-0.10	0.09
Conscientiousness	0.01	0.00	-0.21**	-0.09	0.02	-0.11	-0.13*	0.03
Neuroticism	-0.02	-0.07	0.29**	0.02	0.00	0.22**	0.16*	0.06
Openness	-0.02	0.00	-0.19**	-0.10	-0.08	-0.05	0.10	0.04

\*  $p < .05$ .

\*\*  $p < .01$ .

system which will color how people think and behave and, in part, how people think and behave is their personality (Fleeson, 2001, 2007). Importantly, this approach suggests that personality traits, as most researchers study them today, are externally evidenced, behavioral/attitudinal syndromes that are the result of internal systems (Sherman et al., 2015; Sih et al., 2004). Perceptions, emotions, and motivations are likely just some of those internal systems that create “personality.”

4.1. Limitations and conclusions

While this study provided new insights into how personality may relate to individual differences in perceptions, it was nonetheless, limited. First, the sample was W.E.I.R.D. (Henrich, Heine, & Norenzayan, 2010), which limits the generalizability of our findings. However, if we are correct, patterns of situational perceptions may be more fundamental than personality traits and, thus should be even more stable around the world than personality traits are. Indeed, we would even—at a stretch—contend that these situational perceptions may cross species lines more than personality traits because of convergent evolution and shared phylogenetic histories of species for such fundamental systems as perceptions. Take for instance, the case of trichromatic vision. The ability to perceive red and green (i.e., a difference seen between ripe and unripe fruit) may have evolved in anthropoid apes (living in Africa) and new world monkeys (living in the Americas) because of the selective advantage it provided individuals when engaging in frugivory.

Second, although we have developed a novel method to test for individual differences in perceptions of situations this method is limited in several ways. The three situations we chose were ad hoc and not subject to any pilot testing. There are also likely a myriad of other situations of use for such research. By only choosing three we may have undermined our ability to find cross-situational inconsistencies that could be further informative. This method may require more rigorous psychometric testing because at this point, we can only assert that we had reasonable internal consistency, cross-situational consistency, and face-validity. Prior research (Serfass & Sherman, 2013) used an implicit test which does not lend itself to easy scoring and use and may even have dubious validity.

Third, we used brief measures of personality, and confined ourselves to replication and extension in an incremental fashion. A more systematic research program would be needed to evaluate the way these perceptions relate to a wider range of personality traits (e.g., socio-sexuality, authenticity) including ostensible additions to the Dark Triad traits of sadism (Buckels, Jones, & Paulhus, 2013) and spitefulness (Marcus, Zeigler-Hill, Mercer, & Norris, 2014). Alternatively, experimental approaches might be called for where one manipulates relevant and irrelevant contextual and situational factors to see how they shift perceptions of situations and how they may lead to or be moderated/mediated by behavioral syndromes.

Fourth, the evidence for sex differences in the Dark Triad traits is rather overwhelming (Jonason et al., 2009; Jonason et al., 2017; Jonason & Zeigler-Hill, 2018). A logical prediction would be that the



patterns we observed may be moderated by the sex of the participant. However, we failed to report such tests. We did so because of the greatly underpowered tests we would have within each sex. The issue of power here bears on the trustworthiness and the probative value of such tests to inform theory. Future researchers will need to double (at least) the sample size we have here to provide more trustworthy tests of these associations in men and women.

And fifth, correlational models cannot disentangle the causal order of these two aspects of psychology: perception and personality. Instead, we have reasoned that perceptions are more primary than behavioral syndromes (i.e., personality) based on a Brunswickian framework that creates a causal order based on the nature and specificity of the traits being considered. This is not a problem, however, unique to our study, but is a systemic problem in cross-sectional, personality research. The best that can be done at present, is make and test hypotheses based on strong theoretical foundations like evolutionary, signal detection, and prospect theories.

In conclusion, we have replicated associations between perceptions of situations and the Big Five traits (Serfass & Sherman, 2013) and extend that work to examine the Dark Triad traits. We revealed (1) consistent patterns for mating and deception in the latter and (2) a more eclectic assortment of correlations for the Big Five traits. Both, however, are consistent with the idea that cognitive biases enable people to deal with Type 1 and 2 errors in satisfying their survival, social, and sexual agendas. We contend that while the simplistic explanation for these effects may be that perceptions are downstream *sequelae* of personality, a more defensible position may be that fundamental biases in how people view the world may color the way they think, act, and feel which is what—in part—personality measures capture.

#### CRedit authorship contribution statement

**Peter K. Jonason:** Conceptualization, Methodology, Investigation, Writing - original draft, Writing - review & editing, Visualization, Resources, Project administration. **Ryne A. Sherman:** Conceptualization, Methodology, Writing - review & editing, Data curation, Formal analysis.

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