

Eight misconceptions about the elemental approach and aversive personality trait research: A response to Andrews and colleagues (2023)

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1 | INTRODUCTION

Andrews and colleagues (2023) assert that there are a number of issues with our recent article, “Taking an elemental approach to the conceptualization and measurement of Machiavellianism, narcissism, and psychopathy” (Kay & Arrow, 2022). Many of these issues seem to stem from common misconceptions about the elemental approach and aversive personality trait research generally. We thank Andrews and colleagues—as well as the editor—for the opportunity to address those misconceptions here.

2 | MISCONCEPTION 1: AN ELEMENTAL APPROACH MEANS RESEARCHERS CANNOT STUDY MACHIAVELLIANISM, GRANDIOSE NARCISSISM, AND PSYCHOPATHY AS COMPOUND VARIABLES

Part of the negative reaction to the elemental approach seems to be the belief that researchers taking this approach can no longer study Machiavellianism, grandiose narcissism, and psychopathy as compound variables but must, instead, study the myriad *elements* of Machiavellianism, grandiose narcissism, and psychopathy. Andrews and colleagues note that this is both unparsimonious and impractical, violating the principle of Occam's razor and requiring the estimation of so many parameters that researchers will inevitably find spurious associations.

Fortunately, the elemental approach does not mean researchers cannot study these traits as compound variables. Just as the existence of atoms doesn't mean researchers aren't allowed to study molecules, the existence of personality elements doesn't mean researchers aren't allowed to study higher-order personality traits. The elemental approach simply allows us to identify the aspects of personality that are shared among and unique to each of these constructs, granting researchers the ability to test whether scales are measuring what they are meant to be measuring and, if not, update the scales to better capture the intended constructs.

3 | MISCONCEPTION 2: THE ELEMENTAL APPROACH IS, NECESSARILY, AN ANTAGONISM-CENTERED APPROACH

Another common misconception is that the elemental approach (i.e., breaking down personality traits into smaller elements of personality) is, necessarily, an antagonism-centered approach (i.e., an approach that suggests low agreeableness is at the core of aversive personality traits). This misconception is evident in Andrews and colleagues' claim that we failed to justify the use of the *elemental approach* because *antagonism* is too broad of a construct to capture the core of these traits.

Our response is simply that these two approaches are not identical. We did discuss the antagonism-centered approach at length, but this is because the only model of personality that has consistently been used as a part of an elemental approach is the Five-Factor Model (Costa & McCrae, 1992) and because antagonism appears to do a reasonably good job of approximating the core of common aversive personality traits (Vize et al., 2020, 2021). As noted in our article, we encourage (and are ourselves pursuing) elemental investigations that use models of personality with substantially narrower factors than the Five-Factor Model.

4 | MISCONCEPTION 3: THERE IS NO FORMAL DEFINITION OF "ANTAGONISM"

Andrews and colleagues (2023) argue that the term "antagonism" is just as prone to misinterpretation as the term "dark" because it can "colloquially describe someone who is argumentative". We agree that, *colloquially*, "antagonism" can refer to someone who is argumentative, but, *formally*, the definition of "antagonism" is quite specific: it is the negative pole of agreeableness (Lynam & Miller, 2019). No such formal definition is available for "dark". Researchers, therefore, can (and have) interpreted "dark" in many different ways (e.g., Marcus & Zeigler-Hill, 2015; Visser et al., 2014), leading to confusion about what "dark" personality traits actually are.

5 | MISCONCEPTION 4: THERE IS NO EVIDENCE THAT CONFLATING "DARKNESS" WITH "BADNESS" IS SOCIALLY DAMAGING

In a footnote in our original article, we argued that using the term "dark" to describe aversive personality traits may be harmful, as it reinforces an association between "darkness" and "badness". Evidently, Andrews and colleagues (2023) disagree. They argue that there is no evidence that conflating "darkness" with "badness" is socially damaging.

Not long ago, we would have agreed with Andrews and colleagues (2023). In fact, as recently as 2021, the first author of this response was using the term "dark" in his own work (e.g., Kay, 2021). However, several years ago, we discovered a body of research that made us rethink our position. We cannot summarize all of the research here, but two findings stand out as particularly relevant: (1) people who describe dark colours (e.g., black; brown) using more negative adjectives (e.g., unpleasant; bad) are more likely to harbour negative attitudes towards Black people (Williams, 1969), and (2) kindergarteners who complete a greater number of conditioning trials associating the colour black with positive words feel less animosity towards Black people (Parish & Fleetwood, 1975). We can't speak for other researchers, but, given these findings, we are no longer comfortable using the term "dark" to describe aversive personality traits.

6 | MISCONCEPTION 5: CORRELATIONS DO NOT NEED TO BE STATISTICALLY COMPARED TO CONCLUDE THAT THEY ARE DIFFERENT

In responding to our article, Andrews and colleagues (2023) also asserted that Machiavellianism and psychopathy are empirically distinct because they manifest in opposite relations with various criteria. In support of this claim, they cited seven articles, comprising 10 studies, from Jones and colleagues.

Our examination of these 10 studies surfaced another misconception common to aversive personality trait research: correlations do not need to be statistically compared to conclude that they are different (see Miller et al., 2019). This is, of course, not true. To conclude two correlations are different, researchers must statistically compare the two correlations.

Of the 10 studies reported by Jones and colleagues, only two statistically compared the associations. In those two cases, the associations for Machiavellianism and psychopathy were significantly different (although they were not, as argued by Andrews and colleagues (2023), opposite). We commend Jones and colleagues for testing these differences. Still, we believe it is inappropriate to claim that there is abundant evidence demonstrating that Machiavellianism and psychopathy manifest in different associations when most of the prior evidence never actually tested this claim.

7 | MISCONCEPTION 6: A PARTIALLED VARIABLE REPRESENTS THE SAME CONSTRUCT AS AN UNPARTIALLED VARIABLE

Of the 10 studies reported by Jones and colleagues, we also counted seven cases where the theoretically-aligned “differences” between Machiavellianism and psychopathy only appeared after partialling. This is clearly an issue, as it means the Machiavellianism measures in these studies didn't actually become measures of Machiavellianism until psychopathy was partialled out.¹ We would argue that a measure should be able to assess its intended construct without a large portion of its variance first being removed.

8 | MISCONCEPTION 7: SHORT-FORM MEASURES DO NOT SUFFER THE SAME ISSUES AS LONG-FORM MEASURES

Andrews and colleagues assert that another problem with our argument is that we did not discuss the Short Dark Triad (SD3; Jones & Paulhus, 2014)—a composite measure of Machiavellianism, grandiose narcissism, and psychopathy—or, indeed, any composite measure. As they correctly surmised, this was for the sake of brevity; we didn't discuss all of the single construct measures either.

If we had discussed the SD3, we would have simply noted that it suffers from the same excessive overlap between Machiavellianism and psychopathy as the long-form measures (see Miller et al., 2017). Andrews and colleagues seem to recognize this, as they go on to say that the Short Dark Tetrad (SD4; Paulhus et al., 2020)—a successor to the SD3 that includes everyday sadism—successfully reduced the correlation between Machiavellianism and psychopathy to approximately 0.30. We are, therefore, unsure how not mentioning the SD3 would be a strike against our argument, since, by their own admission, the SD3 suffers from similar issues to the long-form measures.

The reason we did not discuss the SD4 was because it was only published shortly before we submitted our article for publication. Given the research that has been published on the SD4 over the last several years, we would agree that it is much improved over the SD3, although it still appears to suffer from some of the same issues (see Blötner et al., 2022).

9 | MISCONCEPTION 8: THE ELEMENTAL APPROACH CONSTITUTES AN ATTACK ON AVERSIVE PERSONALITY TRAIT RESEARCH

The misconception we would like to close on is the belief that the elemental approach is an attack on aversive personality trait research. Throughout their response, Andrews and colleagues make it clear that they see our article as an act of aggression, in line with what they refer to as other “dubious attacks” on aversive personality trait research.

Our intention in writing our review was neither to attack the field of aversive personality trait research nor to denigrate any past research on the topic. We believe the research being done by aversive personality trait researchers is important, and it is for that very reason that we wrote our review. There are some very real issues with how aversive personality traits are currently assessed, and we believe those issues are hindering the valuable work being done by aversive personality trait researchers. We also believe that an elemental approach can be a powerful tool for resolving many of these issues. We, therefore, see our review not as an attack but as an effort to advance and promote aversive personality trait research.

CONFLICT OF INTEREST

We have no conflict of interest to declare.

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ENDNOTE

¹ Even then, partialled Machiavellianism seems to lack the requisite antagonism to truly be called Machiavellianism (Sleep et al., 2017).

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