In our article in this issue (Lilienfeld et al., 2019), we proposed that some DSM/ICD personality disorders (PDs) are emergent interpersonal syndromes (EISs): socially malignant configurations of distinct personality subdimensions. These conditions are emergent in that they differ from the sum of their parts; hence, the relations among their subdimensions are not merely additive, but interactive as well or instead. Furthermore, they engender distinctive impressions on us, reflecting widely shared folk concepts (McCrae, Costa, & Piedmont, 1993) or prototypes of interpersonally challenging individuals. The Cleckley (1941, 1976) psychopath, we proposed, is a likely example of an EIS. The “mask of sanity” to which Cleckley referred reflects a unique configuration of traits, namely (a) interpersonal charm and poise counterposed against (b) profound affective detachment and (c) impulse...
control deficits, with the traits comprising (a) being largely uncorrelated or perhaps even slightly negatively correlated with those comprising (b) and (c). In conjunction, this blend of traits yields an often-paradoxical clinical picture that is a ready-made prescription for deception, manipulation, and seduction.

We welcome the opportunity to respond to three commentaries by distinguished scholars, who raise provocative challenges to our arguments and intriguing research suggestions. Because they focus primarily on psychopathy, we confine our remarks largely to this condition.

**THE STATUS OF PDS AS FOLK CONCEPTS**

Invoking Jungian archetypes (Jung, 1964/1994), South (2019) observes that “just because humans have a natural tendency to categorize does not mean they are correct” (p. 634). She also argues that “[r]esearch consistently shows that personality disorders are not distinct, natural entities” (p. 634). We concur on both fronts. Still, we propose that the folk concepts reflecting most DSM/ICD PDs broadly mirror prototypes of interpersonal disturbance that matter to us in everyday life. Just as Jung identified archetypes such as the hero and the trickster, psychopathy is captured by folk concepts of the confidence artist and the wolf-in-sheep’s clothing. These “folk taxa” may not correspond to “natural kinds” (Haslam, 2000), but they generate interpersonal reality because people react to them in characteristic ways. These folk concepts are neither “correct” nor “incorrect,” as South implies. Although they do not invariably reflect high levels of covariation among traits in nature, they are psychologically real in that they are part and parcel of our everyday experience (Tellegen, 1993). Indeed, trait groupings that are weakly or negatively correlated, which many researchers would regard as psychometrically problematic given that they do not comprise a unitary construct, may be among the most interpersonally impactful and challenging, as they reflect trait constellations to which we are largely unaccustomed.

**WHICH EISS ARE PERSONALITY DISORDERS?**

Framing their discussion within the broader context of personality disorders, Benning and Smith (2019) observe that there are multiple potential statistical interactions among psychopathy subcomponents and go on to ask, “Which of these represent psychopathy proper?” (p. 626; emphasis in original). They further observe that “[d]etermining which of these [interactions] are necessary or sufficient to be considered psychopathic is a theoretical challenge” (p. 626). Similarly, referring to the distinction between successful and unsuccessful psychopathy, Viding (2019) asks, “[W]ould these be viewed as different PDs under the EIS model?” (p. 641).

We concede that these questions are fraught. At the same time, we suspect that the answers are at least as much analytic (definitional) as empirical (see also Hopwood, 2018). The question of what we term “psychopathy” is in part a matter of preference, and cannot be adjudicated entirely by data on
trait covariation. Psychopathy, like other PDs, is a complex constellation of traits in multidimensional space, and the decision of how we partition this space in accord with differing PD labels is partly a function of the pragmatic purposes these labels serve for us as observers. In our view, the individual who simultaneously displays high levels of all three dimensions of the triarchic model (Patrick, Fowles, & Krueger, 2009), namely, boldness, mean-ness (coldness), and disinhibition, is most likely to resemble the prototypical Cleckley psychopath. But what of individuals who have, say, elevated levels of only boldness and coldness, but not disinhibition: Are they psychopathic too? The answer is at least as much a matter of definitional preference as of data.

As Wittgenstein (1953) observed, words can ensnare us. Once we begin to believe that a contested term, such as “psychopath” or “planet” (see Zachar & Kendler, 2012) is answerable by data alone, we can find ourselves trapped in a seemingly interminable conceptual and empirical quagmire. The meaning of words, as Wittgenstein noted, lies in their everyday use. If we use the term “psychopath” to refer narrowly to the Cleckley psychopath, then a three-way interaction will probably be needed to capture this condition. In contrast, if we use this term more expansively to refer to several “species” of miscreants, then only two traits or perhaps even one trait (e.g., coldness or disinhibition) may be sufficient.

EMERGENT INTERPERSONAL SYNDROMES: TESTS OF STATISTICAL INTERACTIONS

Benning and Smith (2019) offer numerous helpful desiderata for testing statistical interactions in the case of PD subdimensions. We concur with them that adequate tests of the EIS hypothesis will necessitate designs with considerably higher statistical power than have previously been undertaken. Simulations suggest that to reliably estimate interactions, one requires sample sizes approximately 16 times higher than those needed to estimate main effects (Gelman, 2018). We also endorse Benning and Smith's calls for (a) preregistering hypotheses regarding the nature and direction of interactions comprising specific psychopathy subdimensions to afford “riskier” (see Meehl, 1978) tests of the EIS hypothesis and (b) examining potential nonlinear effects in such interactions using spline regression.

We are less certain, however, that “additive combinations of traits that are weakly or inversely related in the population” (Benning & Smith, 2019, p. 630) will provide much headway in accounting for the interpersonally striking impact of most PDs, including psychopathy. As we noted (Lilienfeld et al., 2019), the triarchic subdimensions frequently display opposing external correlates, so combining them additively is likely to dilute or cancel out their differential statistical effects. Furthermore, an additive approach, which generally implies that “more is worse,” is unlikely to account for many of the distinctively paradoxical mixtures of superficial charm and seeming psychological
health co-existing with profound affective and behavioral deficits observed in psychopathy. We would add that our EIS hypothesis does not require that interactions be so large in magnitude that they “drive the clinical picture” (p. 627), although we agree with Benning and Smith that they must be sizeable enough to be noticeable in everyday life. But what magnitude constitutes “sizeable”? We are unaware of a satisfactory answer, and we suspect that it differs across interpersonal realms.

We offer three friendly amendments to Benning and Smith’s recommendations. First, we advocate testing statistical interactions at the level of latent, rather than manifest, variables (see Maslowsky, Jager, & Hemken, 2015), as this approach is likely to minimize measurement error associated with exclusive reliance on psychopathy measures. Second, we suspect that sole reliance on the global trait of boldness, which comprises several separable subdimensions, such as social potency, harm avoidance, and stress immunity (Lilienfeld & Andrews, 1996), may hamper the search for meaningful statistical interactions in the psychopathy literature. Much of what makes psychopathy distinctive is inherently interpersonal, such as its associated propensities toward dishonesty and manipulation. Hence, examinations of boldness subcomponents tied to behaviors, such as social potency and other subtraits linked to charisma, may prove more productive than examinations of the somewhat heterogeneous dimension of boldness. Third, we encourage further examination of criteria tied to the distinctive conjunction of superficial charm and callousness observed in psychopathy, such as deception, conning, and romantic seduction, as these indicators should afford more informative tests of the EIS hypothesis than criteria comprising nonspecific externalizing behaviors. Were tests of such statistical interactions to consistently fail to account for nontrivial amounts of variance in these criteria, it would call our EIS hypothesis of psychopathy into serious question.

South (2019) maintains that we should have conducted a meta-analysis of statistical interaction effects in the psychopathy literature. In principle, we agree that a quantitative review might have been informative. Nevertheless, publication bias and outcome reporting bias would make interpreting this body of literature challenging. As we observed (Lilienfeld et al., 2019), it is plausible if not likely that many authors have neglected to test for statistical interactions in their psychopathy data, whereas others have tested for such interactions and not reported them because they were nonsignificant. Without preregistration of hypotheses and analytic plans, as proposed by Benning and Smith (see also Verschuere, Yasrebi-de Kom, van Zelm, & Lilienfeld, 2019), we worry that a meta-analysis of the published literature would be misleading. As preregistration of personality disorders research hopefully becomes more normative, we should have clearer answers regarding the nature, magnitude, and replicability of interaction effects.
BOLDNESS AND MOTIVATION

We agree with South (2019) that further investigation of the motivational functions associated with high levels of boldness is warranted (see DeYoung & Krueger, 2018, for a broader discussion of the goal-directed functions of personality traits). We would add that a thoroughgoing consideration of the operant functions of psychopathic behaviors has been strikingly absent from the bulk of the psychopathy literature. Many of these acts, such as lying, conning, and cheating, are often interpersonally disastrous in the long term, so a better understanding of the short-term reinforcements afforded by these behaviors could help us to discover why they are (a) maintained and (b) challenging to extinguish. We suggest that in the presence of antagonism, poor impulse control, and other largely unsavory traits, boldness—especially in the interpersonal realm—may facilitate individuals’ attainment of antisocial goals through deception, manipulation, mate-poaching, and the like. High levels of boldness, which are associated with charm and insensitivity to danger cues (Patrick et al., 2009), are likely to boost individuals’ success in these endeavors through the concealment of antisocial motives, as well as a willingness to take social risks. Konnikova’s (2017) book The Confidence Game offers numerous examples of how social boldness facilitates the manipulation of unwitting victims.

DEVELOPMENTAL CONSIDERATIONS

Viding (2019) contends that our EIS hypothesis of psychopathy would be enriched by more explicit incorporation of developmental considerations, and we wholeheartedly agree. Although the paucity of data on the trajectory of boldness in early life renders most hypotheses in this regard speculative, we offer two provisional thoughts. First, we conjecture that the developmental impact of boldness is moderated by parenting styles, with positive parenting behaviors that imbue children with a sense of authentic pride being likely to channel boldness into prosocial rather than antisocial outlets in adulthood (Costello, Unterberger, Watts, & Lilienfeld, 2018; Lykken, 1995). Second, we posit that the role of boldness in predicting malignant interpersonal outcomes in interaction with meanness may become increasingly pronounced as theory of mind capacities, which presumably facilitate effective deception and manipulation of others, become more advanced over the course of childhood and adolescence (see Doherty, 1988). Specifically, as children develop more sophisticated capacities to anticipate and simulate the thoughts and feelings of others, boldness may become increasingly influential as a contributor to the exploitation of others, as it may enable successful deception and manipulation among those who are strongly predisposed toward callousness and aggression.
PSYCHOPATHY AND VICTIMS

We were gratified by Viding’s (2019) excellent suggestion that our EIS hypothesis implies that the psychopathy field should accord greater attention to the role of victims. Admittedly, psychologists have found it challenging to detect consistent individual differences in the capacity to detect deception (Bond & DePaulo, 2008). Most of us possess an “honesty bias,” that is, a propensity to assume that most people are truthful (Michaelian, 2013). As a consequence, virtually all of us are easily duped, especially by skilled fabricators. We suspect that psychopathic individuals routinely capitalize on this bias by mimicking honesty and thereby betraying the trust of those of us who are most trusting. Interestingly, in an investigation using videotaped interviews of prisoners, Miller, Rufino, Boccaccini, Jackson, and Murrie (2011) found that raters higher in agreeableness were more likely than other raters to give offenders lower (less psychopathic) scores on the Psychopathy Checklist Revised, especially on its interpersonal (e.g., narcissism, superficial charm) items. This study, although based on a small sample (N = 22) of raters, raises the possibility that kind-hearted individuals are especially prone to overlook or excuse psychopaths’ deceptive behaviors (see also Vera et al., 2019).

Although few of us are uniquely gifted at detecting deception, some of us may be particularly susceptible to victimization by psychopathic predators. Building on work that sexual assault victims are especially likely to display distinctive features in their gait (e.g., asynchronous leg movements; Grayson & Stein, 1981), Book and colleagues (Book, Costello, & Camilleri, 2013; Wheeler, Book, & Costello, 2009; but see Denardo Roney, Falkenbach, & Avenson, 2018, for somewhat different results) found that individuals with marked affective and interpersonal psychopathic features are especially adept at picking out prior assault victims while watching videotapes of their walking patterns. Denardo Roney et al. (2018) found that taking self-defense classes was associated with lower perceptions of assault victim vulnerability, although these classes did not significantly diminish psychopathic participants’ accuracy in detecting such vulnerability. Bearing in mind Viding’s (2019) caveat that causation should not be equated with blame, these findings, if replicable, may ultimately pave the way for promising educational interventions designed to protect vulnerable individuals from exploitation by psychopaths.

CONCLUDING THOUGHTS: THE EIS AND HEURISTIC VALUE

Some philosophers of science suggest that one key criterion for appraising a scientific theory’s worth is its heuristic value: its capacity to generate fruitful hypotheses (Cramer, 2013). Using this admittedly subjective metric, these three commentaries leave us cautiously optimistic that our EIS hypothesis

1. It is debatable, however, whether this “bias” is genuinely a bias, if by bias we mean systematic error. Research suggests that most individuals are reasonably honest in most situations (e.g., Cohn, Maréchal, Tannenbaum, & Zünd, 2019).
will be promising in pointing to novel directions in research on PDs. At the very least, we hope that this hypothesis will encourage researchers and theoreticians to explore alternative (e.g., interactive) models, some of which may help to reconcile several of the longstanding anomalies (e.g., high levels of heterogeneity) in the PD literature.

REFERENCES


