One Measure Does Not a Construct Make:
Directions Toward Reinvigorating Psychopathy Research—
Reply to Hare and Neumann (2010)

Jennifer L. Skeem
University of California, Irvine

David J. Cooke
Glasgow Caledonian University

In our article (J. L. Skeem & D. J. Cooke, 2010), we outlined the dangers inherent in conflating the Psychopathy Checklist—Revised (PCL–R; R. Hare, 1991) with psychopathy itself. In their response, R. Hare and C. Neumann (2010) seemed to agree with key points that the PCL–R should not be confused with psychopathy and that criminal behavior is not central to psychopathy; at the same time, they said we provided no clear directions for theory or research. In this rejoinder, we clarify our argument that progress in understanding the unobservable construct of psychopathy hinges upon setting aside procrustean dependence on a monofocal PCL–R lens to test (a) actual theories of psychopathy against articulated validation hierarchies and (b) the relation between psychopathy and crime. In specifying these conceptual and applied directions, we hope to promote constructive dialogue, further insights, and a new generation of research that better distinguishes between personality deviation and social deviance.

Keywords: psychopathy, criminal behavior, construct validity, measure, Psychopathy Checklist—Revised

In the past half-century, substantial strides have been made toward illuminating the construct of psychopathy. In our article (Skeem & Cooke, 2010), we expressed concern that the tool used to make recent strides has become a barrier to further scientific progress. We noted signs of mistakenly equating that tool, the Psychopathy Checklist—Revised (PCL–R; Hare, 1991), with psychopathy itself. The PCL–R was developed for offenders, contains many references to crime, and has generated a burgeoning literature on the utility of psychopathy in predicting violent and other criminal acts. The field's predominant reliance on the PCL–R and its derivatives has established a literature on something akin to unsuccessful psychopathy—the tool assesses an admixture of basic tendencies (core emotional detachment) and characteristic adapta-

tions, the latter of which focus almost exclusively on criminal behavior (ignoring heroism, business prowess, and other potential successful adaptations). We believe there has been a largely unrecognized drift from the Cleckleyan conceptualization of psychopathy upon which the PCL–R largely is based toward the notion that psychopathy is "what the PCL–R measures." In unpacking concerns about the drift toward the view that crime is central to psychopathy, we hoped to encourage constructive dialogue that could lead toward the next stage in the study of psychopathy.

We are pleased that Hare and Neumann (2010) appeared to agree with some of our main points. First, they seemed to agree that antisocial behavior should be distinguished when possible from criminal behavior and that criminal behavior is not central to psychopathy. Second, they seemed to agree that the PCL–R should not be confused with psychopathy and that use of alternative methods of operationalizing psychopathy is vital for the field to progress.

Despite their agreement with the latter point, Hare and Neumann (2010) seemed to endorse a view of the PCL–R as an anchor for psychopathy's nomological network. A collection of correlations between the PCL–R and other observed variables does not comprise a nomological network: Instead, that network must be held together by explicit and rigorously tested hypotheses about the relations among measures and constructs (Cronbach & Meehl, 1955). In the study of Cleckleyan psychopathy, we believe the intervening variable of the PCL–R has quietly transformed into a hypothetical construct. Applying Morey's (1991) general concerns about diagnostic classification, such a process is problematic, as it results in "a somewhat circular elaboration of the construct that could be altered to suit particular circumstances" (p. 291). Put simply, until researchers determine that a correlate (e.g., violence) found and replicated largely based on the PCL–R and its derivatives generalizes to alternative measures of psychopathy, they will

not know the extent to which the finding is specific to the PCL–R per se or represents a valid knowledge claim about psychopathy in general. Because constructs are unobservable, indefinite, and evolving, they are best served by multiple and incrementally revised measures. After wearing the same glasses for years, researchers may find that a new pair of multifocal lenses sharpens their view of psychopathy by allowing them to shift views through more than one point of focus.

Despite these substantial points of (near) consensus, there are several areas of disagreement between our article and Hare and Neumann's (2010) commentary. Our article was intended as an accurate, balanced, and scholarly critique of the field. We regret that Hare and Neumann did not perceive it as such. Still, the field of psychopathy research, largely initiated by Hare and his colleagues, is best served by constructive criticism of the prevailing paradigm. Hare and Neumann's response actually helps illustrate our point about the strength of that paradigm. For example, use of the phrase *gold standard* has been applied so routinely in this field to the PCL–R that examples of this mistake can be found not only in their writing but also in ours. Although it is less problematic to reference the PCL–R as a gold-standard measure than as the gold standard of psychopathy itself, this shared mistake is noteworthy, given our agreement that psychopathy cannot be reduced to the PCL–R. Equally noteworthy is the almost routine confusion of the PCL–R's factor structure with a model of psychopathy itself. In this rejoinder, we address Hare and Neumann's criticism that our arguments about construct validity provide no "clear directions for theory and research" (Hare & Neumann, 2010, p. 446). We focus on two overarching and related directions—one theoretical and one applied—that we hope lead to further insights characterizing a new stage of science on psychopathy.

Direction 1: Testing Alternative Conceptualizations of Psychopathy

Theory as a Necessary Base for Adequate Mapping of Psychopathy: Cleckley and Construct Drift

Despite Hare and Neumann's (2010) agreement that researchers should not confuse measures with constructs, they devoted a substantial proportion of their response to discussing "models of psychopathy" (p. 451) defined solely by structural analyses of the PCL–R. We have dealt with methodological problems with the PCL–R's four-factor model, which Hare and Neumann have not addressed, elsewhere (Cooke, Michie, & Skeem, 2007). We explicitly set aside factor analytic arguments in our article because their results depend entirely upon the input: Continued analysis of the same 20-item pool cannot address the fundamental issues we raised. We reviewed empirical evidence that the PCL–R imperfectly maps the domain of interest by (a) excluding lack of anxiety or fearlessness, which may be central to defining psychopathy, and (b) including criminal behavior, which may not be central.

Our basic premise was that a clear theory of psychopathy should guide articulation and measurement of the construct. Although any sound theory mentioned in our article would do, Cleckley's conceptualization happens to be the one linked with the PCL–R. Hare (1991) indicated that "to a large extent, the 'Cleckley psychopath' is the clinical basis for the PCL and PCL–R" (p. 2), and he

signaled this substantial influence with his title, "Twenty Years of Experience With the Cleckley Psychopath" (Hare, 1986, p. 3). Even Hare and Neumann (2010) protested that differences between the PCL–R and Cleckley's conceptualization "have been exaggerated" (p. 450). At the same time, however, they argued that Cleckley's conceptualization "should not be accepted uncritically" (Hare & Neumann, 2010, p. 450). We agree wholeheartedly . . . just as the PCL–R should not be mistaken for a conceptualization or theory of psychopathy. It is a measure—no more. Without a theory to test and explicitly revisit, there is little basis for critical review of empirical results, for iterative refinement of imperfect measures, and for evolution in researchers' understanding of the unobservable construct of psychopathy.

Patrick (2006) grouped Cleckley's conceptualization into three groups of features: core *emotional and interpersonal deficits* underpin orthogonal facets of *positive adjustment* and *behavioral deviance*. Psychopathic individuals display a convincing façade of normal functioning that masks substantial impairment. Arguably, the mask is what makes psychopathy so fascinating as an interpersonal disorder. Patrick explained how Cleckley's features of positive adjustment (which Hare & Neumann, 2010, dismissed as irrelevant to psychopathy) were deleted from the PCL–R during the measure's development. Given that PCL items were retained in part based on their contribution to the overall reliability of the scale, "indicators of positive adjustment presumably dropped out because they failed to coalesce with the larger proportion of (pathological) indicators" (Patrick, 2006, p. 613). Support for this proposition is found in early factor analyses of the Cleckleyan criteria (dominant component: emotional and interpersonal deficits, with small psychological adjustment component) and of the original PCL (dominant component: behavioral deviance, with no adjustment component; Patrick, 2006). This type of problem with test construction could be prevented in future research by (a) clearly articulating the construct and its facets in advance and (b) ensuring that each facet is measured reliably to avoid underestimating its contribution to the scale (see Smith, Fischer, & Fister, 2003).

Beyond guarding against the loss of facets that may prove valid, it is crucial during test construction to exclude items that "are correlates of the target construct but not prototypic of it" (Smith et al., 2003, p. 468) because their inclusion will create a measure of more than one construct. In our article, we reviewed evidence that violent and other criminal behavior is best viewed as a downstream correlate of psychopathy. Cleckley considered criminal behavior, as Hare and Neumann (2010) noted, but he did not view it as sufficiently important to include in his list of criteria (only inadequately motivated antisocial behavior appeared). Nor did he include any "specific indicators of hostility or aggression" (Patrick, 2006, p. 607). Nevertheless, criminal behavior comprises several of the PCL–R's items and permeates others. As noted by Widiger (2006), given the PCL–R item descriptions and reliance on criminal records, "it is quite possible, perhaps even likely, that the assessment of many of the core features of psychopathy have been assessed on the basis of a prisoner's antisocial, criminal behaviors" (p. 161). Hare and Neumann seemed to agree that criminal behavior is not central to the construct of psychopathy. Why, then, feature it so prominently in the PCL–R and its derivatives?

Factor Analysis as a Tool to Explore Theories Rather Than Confirm Preconceptions: The PCL–R Is More Than "Too Popular"

Factor analysis of the PCL–R cannot fix the measure's construct underrepresentation (e.g., lack of anxiety) or inclusion of construct-irrelevant variance (e.g., criminality). Factor analysis is routinely used in measure development. Yet no statistical procedure will mechanically generate truth about psychopathy (see Meehl, 1992). In applying factor analysis, it is important to recognize "the frequent presence and the powerful effects of 'prestructuring'" the item set (Block, 1995, p. 189, discussed this issue in application to general models of personality). The following case study illustrates the unsettling consequences of this issue for scientific progress, particularly when data are viewed through a monofocal PCL–R lens. This case describes the recent development of a psychopathy scale for nonoffenders and demonstrates a concern reaching well beyond "the PCL–R is too popular" (Hare & Neumann, 2010, p. 449).

The process began with Williams and Paulhus's (2004) factor analysis of students' responses to 60 "maximally inclusive" (p. 768) items. In their view, the results were "disappointing": They did not "succeed in capturing the two factors of psychopathy as outlined by Hare and colleagues" (Williams & Paulhus, 2004, p. 776). Instead, one factor reflected behavioral deviance and manipulation, and the other reflected self-confidence and low anxiety. Importantly, these factors resembled the Impulsive Antisociality and Fearless Dominance factors that often are identified for the Psychopathic Personality Inventory (PPI; Lilienfeld & Widows, 2005; for a review, see Poythress et al., 2008). In fact, the scale correlated strongly with the PPI ($r = .77$; Williams & Paulhus, 2004). Nevertheless, the authors rejected this factor solution. They seemed relieved that a modified version of the scale correlated with "what is arguably the ultimate criterion for a measure of psychopathy—delinquent behavior" (Williams & Paulhus, 2004, p. 774).

Next, Williams, Paulhus, and Hare (2007) endeavored to rehabilitate the scale by (a) adding 20 items to tap criminal/antisocial behavior and (b) deleting low-anxiety items to rid the scale of the emotional stability component, which "fails to behave like an element of psychopathy" (p. 207). How so? Like the PPI's Fearless Dominance factor, it "does not consistently predict delinquent behavior" (Williams et al., 2007, p. 207). Factor analysis of students' responses to this revised 77-item scale yielded a four-factor solution that resembled Hare's (2003) representation of the PCL–R, providing support for the authors' decision to alter the item pool. Confirmatory factor analysis of a reduced 40-item scale created by selecting 10 items per facet indicated adequate fit for a four-factor structure and generally replicated the PCL–R's relationships with other observed variables. The authors concluded that "the four factors of psychopathy can be captured via self-report" (Williams et al., 2007, p. 215) in a nonoffender sample and observed that the generalization comes complete with an ability to predict misconduct. The scale's lack of association with neuroticism, they said, is "consistent with Hare's doubts about the role of anxiety in psychopathy" (Williams et al., 2007, p. 215).

This is a vivid example of the absence of meaningful tests of theory that has begun to characterize much research on psychopathy. This scale was constructed to represent the PCL–R, in both its structure and its relations to surface variables. Criminal behavior featured prominently in both the measure and criterion variables. Emotional stability was dismissed because it did not predict delinquency and therefore could not be part of psychopathy. When the scale conformed to the PCL–R's structure and correlates, this tautologically was interpreted as evidence for both the validity of the scale and the PCL–R model of psychopathy. Similarities between initial findings and both Cleckleyan psychopathy and an alternative measure of psychopathy were neglected. This measure, then, reflects a confirmatory bias that assumes the PCL–R structure is a given. A more productive approach would permit the findings to guide and perhaps modify the authors' conception of psychopathy and selection of items.

In Hare and Neumann's (2010) response, behavior genetic and laboratory data at times seemed distorted through the same PCL–R lens. For example, the authors asserted that the only behavior genetic study of psychopathy among adults (Blonigen, Hicks, Krueger, Patrick, & Iacono, 2005) indicated that covariation between antisocial behavior and emotional detachment "can be explained by common genetic factors" (Hare & Neumann, 2010, p. 450). In fact, the opposite is the case. In this non-PCL–R study, Blonigen et al. (2005) found that Impulsive Antisociality and Fearless Dominance were phenotypically and genetically uncorrelated: Each "may derive from separate etiological processes that are substantially [about half] genetic in nature" (Blonigen et al., 2005, p. 644). Similarly, Hare and Neumann suggested that Vanman, Mejia, Dawson, Schell, and Raine (2003) found that both emotional detachment and antisocial behavior are necessary for reduced affective modulation of the startle response. In fact, Vanman et al. found that emotional detachment related to reduced startle potentiation, whereas antisocial behavior related to increased startle potentiation that seemed indicative of "emotional sensitivity" (Vanman et al., 2003, p. 2019).

Understanding "the Construct Measured by the PCL–R and Its Derivatives" and Testing Actual Theories of Psychopathy

Hare and Neumann (2010) asserted that "it is the construct measured by the PCL–R and its derivatives—not the one some claim was described by Cleckley—that has received extensive empirical support" (p. 450). This assertion raises two crucial questions to address in future research. First, what is that unitary construct, if not Cleckleyan psychopathy? Given that a construct cannot be reduced to a measure, researchers must define and understand what unobservable construct is tapped by the PCL–R. One concrete direction for research involves determining the extent to which this construct is something akin to secondary psychopathy—an emotionally disturbed and violent variant of the construct. As explained in Patrick's (2006) review, use of the PCL–R creates "a picture of the psychopath as more aggressive and psychologically maladjusted" than "Cleckley's portrayal of the prototypical psychopath" (p. 614). Rather than fit a construct to a measure, science and practice would be better served by altering the proposed interpretation of the PCL–R. If one interprets the PCL–R partly or chiefly as a measure of secondary psychopathy, for example, one will still need to test this altered hypothesis in future research using multiple measures and methods. If the predictions hold, one can be less worried that "nomologicals were

gerrymandered to fit the peculiarities" (Cronbach & Meehl, 1955, p. 296) of the test, that is, in this case, that one has created a variant of psychopathy to fit the PCL–R.

Second, how do researchers know that "the construct measured by the PCL–R" (Hare & Neumann, 2010, p. 450) is more valid than the Cleckleyan conceptualization of psychopathy (or any other reasonable alternative)? What conceptualizations have been compared and by what yardstick? In our article, we outlined steps needed to arrive at such comparative conclusions. In our view, rigorous comparisons are precisely what the field needs to advance to the next stage. For each conceptualization, this will require specification of a refutable theory of psychopathy that can dictate a validation hierarchy. Given the current state of the science, we assume psychopathy is a theoretical construct involving hypothesized entities and processes—not a construct that involves what Skinner (1981) called simple "description" (p. 82). Hare and Neumann have yet to articulate a testable and refutable theory to explain how and why emotional detachment and antisocial behavior uniquely combine to form psychopathy; instead, the focus largely has been on surface correlations. Although Cleckley's conceptualization could be used to construct a validation hierarchy (as illustrated in our article), it has yet to be adequately operationalized. In short, there are rich opportunities for work at this level. Next, once measures and/or validation hierarchies are developed, they can be applied to rigorously evaluate alternative conceptualizations of psychopathy. Applying Morey's (1991) general principles, emphasis is placed on "explanatory principles that . . . determine what specific correlations between attributes are noteworthy" (p. 292). Because "everything is correlated with everything else, more or less" (Meehl, 1990, p. 123), associations with violence and other crime are not particularly noteworthy for a measure of psychopathy without some compelling explanatory reason. The goal is to develop a valid measure of the construct, not to create another risk-assessment tool. Finally, the alternative conceptualizations can directly be compared based on the extent to which they identify homogeneous groups of individuals, illuminate etiology, and inform treatment.

Direction 2: Testing the Relation Between Psychopathy and Crime

Antisociality and Criminal Behavior

After our article was accepted for publication, Hare and Neumann demanded prepublication changes that inspired us to be more precise about the conceptual distinction between criminal and antisocial behavior and between behavioral acts and personality traits. So, we are puzzled by their puzzlement over our title change. Here and Neumann note that we incorrectly quoted their 2005 article when we used the term *criminal* rather than *antisocial*. This raises an important point. When talking about the PCL–R and psychopathy, the field has come to use the two terms interchangeably. This is not surprising. Although hare and Neumann carefully use the term *antisocial* to describe psychopathy, their operationalization of *antisocial* prominently—if not primarily—features criminal behavior. At times, the PCL–R specifically—and explicitly—defines antisocial behavior narrowly in terms of criminal behavior; for example,

Item 18 describes an individual who has a history of serious antisocial behavior as an adolescent, aged 17 and below. This includes both charges and convictions for criminal and statutory offences . . . . In scoring this item, we count only formal contacts with the criminal justice system. (Hare, 2003, p. 45)

More broadly within the PCL–R, criminal behavior (a) largely comprises the five items that load on the facet that they choose to label *antisocial* and (b) appears in item descriptions of core traits ("for example, lack of empathy or callousness can be inferred on the basis of the commission of particularly brutal, heinous acts of violence or criminal exploitation"; Widiger, 2006, pp. 160–161). Hare and Neumann (2010) asserted that the screening version of the PCL (Hart, Cox, & Hare, 2005) is "without reference to criminality" (Hare & Neumann, 2010, p. 447). However, most of us would regard descriptions of physical violence (Item 8), child neglect, "defaulting on loans, not paying bills, or not paying child support" (Hart et al., 2005, p. 30, Item 10), being "frequently in trouble with the law" (Hart et al., 2005, p. 30, Item 11), and having "had legal problems as an adult, including charges or convictions for criminal offenses" (Hart et al., 2005, p. 30, Item 12), as referencing criminality. In the PCL–R and its derivatives, the criminal behavior facet falls under the umbrella of old Factor 2, or antisocial behavior. Given that most scale-level research reports results for the PCL–R two-factor model, we reviewed that evidence against a theory-based validation hierarchy to demonstrate that there is more compelling evidence for emotional detachment than for antisocial behavior (under which criminal behavior is nested).

Toward Escaping Validation Tautologies

Hare and Neumann's (2010) substitution of the term *antisociality,* as if this were not an umbrella term prominently comprising violence and other criminal behavior, does not invalidate our point that the PCL–R both inventories criminal behavior and purports to explain criminal behavior. Inferring a trait from behavior and then using the trait to explain that behavior is tautological: Psychopathy cannot both embody and explain crime. The contribution of psychopathy to criminal behavior is "an empirical question that can only be answered if the two are identified independently" (Blackburn, 1988, p. 507).

Removing indices of criminal behavior from the PCL–R measures will weaken their predictive utility for crime. For example, Walters, Knight, Grann, and Dahle (2008) found that the first three facets of the PCL measures "contributed minimally to predictions of recidivism and violence beyond what could be achieved with the [a]ntisocial facet alone" (p. 403). Hare and Neumann (2010) pointed out that the emotional detachment scale sometimes adds incremental utility to the antisocial behavior scale in postdicting or predicting instrumental violence specifically, but this effect is swamped in most research, where interest lies in the larger class of violence (much of which may be reactive) and recidivism. Moreover, even in the instrumental crime domain, circularity of reasoning is a threat: PCL–R ratings of emotional detachment include such features as "cold-blooded murder" (Hare, 1991, p. 22) and "schemes and scams motivated by a desire for personal gain (money, sex, status, power, etc.) and carried out with no concern for their effects on victims" (Hare, 1991, p. 20). Several risk-

assessment tools, including tools that systematize ratings of chronic criminal behavior, are available to fill any gap in predictive utility created by divesting the PCL–R measures of criminality. If one's goal is to understand psychopathy—what it is and how it relates to violence and other crime—the first step is to remove indices of the latter from measures of the former.

The second step is to use more nuanced measures of violence and other criminal behavior. As noted in our article, validation hierarchies dictated by many theories of primary psychopathy will not feature prediction of criminal behavior per se. However, the motivation or goals for such behavior may well play a role. For example, would a complete measure of Cleckleyan psychopathy predict inadequately motivated criminal behavior or capricious, goalless, self-defeating crime with "a peculiarly aimless quality" (Patrick, 2006, p. 609)? Would measures of Karpman's (1941) primary and secondary psychopathy predict instrumental and hostile reactive aggression, respectively? Researchers can answer such questions only if they measure psychopathy cleanly, use more nuanced measures of violence and other criminal behavior, and test theories about the relation between the two.

As observed by Macdonald and Iacono (2006), "a great deal is known about antisocial personality disorder, criminality, and the psychopathic offender as defined by the PCL–R. Much less is known about psychopathy, especially outside prison populations" (p. 383). Despite the unquestioned contributions of the PCL–R and its derivatives, it is time to usher in the next generation of research of psychopathy—one that distinguishes between the domains of personality deviation and social deviance (Blackburn, 1988) to test alternative conceptualizations of psychopathy. Diversifying the study of psychopathy and increasing its rigor can only lead to further insights about the construct.

References

Blackburn, R. (1988). On moral judgments and personality disorders: The myth of psychopathic personality revisited. *British Journal of Psychiatry, 153,* 505–512.

Block, J. (1995). A contrarian view of the five-factor approach to personality description. *Psychological Bulletin, 117,* 187–215.

Blonigen, D., Hicks, B., Krueger, R., Patrick, C., & Iacono, W. (2005). Psychopathic personality traits: Heritability and genetic overlap with internalizing and externalizing psychopathology. *Psychological Medicine, 35,* 637–648.

Cooke, D., Michie, C., & Skeem, J. (2007). Understanding the structure of the Psychopathy Checklist—Revised: An exploration of methodological confusion. *British Journal of Psychiatry, 190*(Suppl. 49), s39–s50.

Cronbach, L., & Meehl, P. (1955). Construct validity in psychological tests. *Psychological Bulletin, 52,* 281–302.

Hare, R. (1986). Twenty years of experience with the Cleckley psychopath. In W. Reid, D. Dorr, J. Walker, & J. Bonner (Eds.), *Unmasking the psychopath* (pp. 3–27). New York: Norton.

Hare, R. (1991). *The Hare Psychopathy Checklist—Revised (PCL–R) manual* (1st ed.). Toronto, Ontario, Canada: Multi-Health Systems.

Hare, R. (2003). *The Hare Psychopathy Checklist—Revised (PCL–R) manual* (2nd ed.). Toronto, Ontario, Canada: Multi-Health Systems.

Hare, R., & Neumann, C. (2010). The role of antisociality in the psychopathy construct: Comment on Skeem and Cooke (2010). *Psychological Assessment, 22,* 446–454.

Hart, S., Cox, D., & Hare, R. (1995). *The Hare Psychopathy Checklist: Screening Version (PCL: SV).* Toronto, Ontario, Canada: Multi-Health Systems.

Karpman, B. (1941). On the need for separating psychopathy into two distinct clinical types: Symptomatic and idiopathic. *Journal of Criminology and Psychopathology, 3,* 112–137.

Lilienfeld, S., & Widows, M. (2005). *Psychopathic Personality Inventory—Revised, professional manual.* Lutz, FL: Psychological Assessment Resources.

Macdonald, A., & Iacono, W. (2006). Toward an integrated perspective on the etiology of psychopathy. In C. Patrick (Ed.), *Handbook of psychopathy* (pp. 375–385). New York: Guilford Press.

Meehl, P. (1990). Appraising and amending theories: The strategy of Lakatosian defense and two principles that warrant it. *Psychological Inquiry, 1,* 108–141.

Meehl, P. (1992). Factors and taxa, traits and types, differences of degree and differences in kind. *Journal of Personality, 60,* 117–174.

Morey, L. (1991). Classification of mental disorder as a collection of hypothetical constructs. *Journal of Abnormal Psychology, 100,* 289–293.

Patrick, C. (2006). Back to the future: Cleckley as a guide to the next generation of psychopathy research. In C. Patrick (Ed.), *Handbook of psychopathy* (pp. 605–617). New York: Guilford Press.

Poythress, N., Lilienfeld, S., Skeem, J., Douglas, K. Edens, J., & Epstein, M. (2008). *The Psychopathic Personality Inventory and Levenson Primary and Secondary Psychopathy Scales: An examination and comparison of construct validity.* Manuscript submitted for publication.

Skeem, J. L., & Cooke, D. J. (2010). Is criminal behavior a central component of psychopathy? Conceptual directions for resolving the debate. *Psychological Assessment, 22,* 433–445.

Skinner, H. (1981). Toward the integration of classification theory and methods. *Journal of Abnormal Psychology, 90,* 68–87.

Smith, G., Fischer, S., & Fister, S. (2003). Incremental validity principles in test construction. *Psychological Assessment, 15,* 467–477.

Vanman, E., Mejia, V., Dawson, M., Schell, A., & Raine, A. (2003). Modification of the startle reflex in a community sample: Do one or two dimensions of psychopathy underlie emotional processing? *Personality and Individual Differences, 35,* 2007–2021.

Walters, G., Knight, R., Grann, M., & Dahle, K. (2008). Incremental validity of the Psychopathy Checklist facet scores: Predicting release outcome in six samples. *Journal of Abnormal Psychology, 117,* 396–405.

Widiger, T. (2006). Psychopathy and *DSM–IV* psychopathology. In C. Patrick (Ed.), *Handbook of psychopathy* (pp. 156–171). New York: Guilford Press.

Williams, K., & Paulhus, D. (2004). Factor structure of the Self-Report Psychopathy scale (SRP-II) in non-forensic samples. *Personality and Individual Differences, 37,* 765–778.

Williams, K., Paulhus, D., & Hare, R. (2007). Capturing the four-factor structure of psychopathy in college students via self-report. *Journal of Personality Assessment, 88,* 205–219.