The Mismeasure of Psychopathy: A Commentary on Boddy's PM–MRV

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The Mismeasure of Psychopathy: A Commentary on Boddy's PM-MRV

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Abstract Boddy and his colleagues have published several articles on "corporate psychopathy" using what they refer to as a Psychopathy Measure—Management Research Version (PM-MRV). They based this measure on the items that comprise the *Interpersonal* and *Affective* dimensions (Factor 1) of the *Hare Psychopathy Checklist-Revised* (PCL-R), a widely used copyrighted and controlled instrument. The PM-MRV not only misspecifies the construct of psychopathy, but also serves as an example of the problems associated with an attempt to form a "new" scale by adapting items from a proprietary scale. The PCL-R measures a superordinate construct underpinned by *four* correlated dimensions or first-order factors, not just the two in the PM-MRV. The other two dimensions are *Lifestyle* and *Antisocial,* which together form Factor 2 of the PCL-R. As defined by the PCL-R, psychopathy requires high scores on both Factor 1 and Factor 2. Lack of validity aside, even if the PM-MRV were to be a useful measure of Factor 1, it would not discriminate between psychopathy and other "dark personalities," such as Machiavellianism and narcissism, which, along with psychopathy, form the Dark Triad. This lack of discrimination stems from the fact that each of these personalities shares features measured by Factor 1 and, by implication, by the PM-MRV. Research findings based on the PM-MRV may have some meaning with respect to dark personalities in general, but their relevance to psychopathy, as measured with the PCL-R, is tenuous at best.

Keywords Corporate psychopathy · Measurement issues · PM-MRV · PCL-R · Dark Triad · Corporate misbehavior

Over the past quarter-century, there has been a more than tenfold increase in the number of published articles per year on psychopathy (from about 30 to about 400, with a cumulative total of more than 3000; Web of Science). An early impetus for this dramatic surge in research activity was the development and widespread adoption of the *Psychopathy Checklist-Revised* (PCL-R; Hare 1991, 2003) as a common metric for communication among investigators and practitioners. Most of this activity has taken place with offender and forensic psychiatric populations. However, research in various non-forensic and community settings has been facilitated by the use of a derivative of the PCL-R, the *Psychopathy Checklist: Screening Version* (PCL: SV; Hart et al. 1995), and by the development of several self-report measures (e.g., Levenson et al. 1995; Lilienfeld and Widows 2005; Lynam et al. 2011; Paulhus et al. 2014). These and other instruments comprise a *nomological network* of psychopathy (Cronbach and Meehl 1955), anchored primarily by the PCL-R (Hare et al. 2012; Benning et al. 2005; Vachon et al. 2012; Wall et al. 2014). The integrity and utility of the network depends on the psychometric properties of its components and on the manner in which they relate to one another.

Introduction of a new psychopathy instrument must undergo rigorous validation, without which it is impossible to know if the instrument accurately taps the construct of interest. We illustrate this problem with reference to the

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recent use by Boddy of an instrument described as the "Psychopathy Measure-Management Research Version'' (PM-MRV; Boddy 2010), which is based upon, and bears a striking resemblance to, items in the PCL-R. To understand the issues involved here, it is necessary first to know what the PCL-R is and what it is intended to measure.

The PCL-R

The PCL-R is a professionally controlled and copyrighted instrument, developed and validated over more than three decades by Hare, his colleagues and students, and hundreds of researchers. It is a 20-item construct rating scale for the assessment of personality traits and behaviors related to traditional conceptions of psychopathy (Cleckley 1976; Hare et al. 2012, 2014; Hervé & Yuille 2007; Patrick 2007). Individuals with a high score on the PCL-R are grandiose, deceptive, superficial, manipulative, affectively shallow, lacking in empathy, guilt, or remorse, irresponsible, and impulsive, with a tendency to ignore social conventions and mores. A clinician or researcher uses Interview and file information to score each item on a 3-point scale (0, 1, 2), according to the extent to which the item description applies to the individual (see Hare et al. 2013 for a recent outline). The total score can vary from 0 to 40 and reflects the extent to which an individual matches the traditional prototypical psychopath; a score of 30 commonly is used as a convenient threshold for psychopathy.

As measured by the PCL-R, psychopathy is a dimensional, multi-faceted superordinate construct. Eighteen of the items form four first-order dimensions or factors (Neumann et al. 2007): *Interpersonal* (glibness/superficial charm, grandiose sense of self-worth, pathological lying, conning/manipulative); *Affective* (Lack of remorse or guilt, Shallow affect, Callous lack of empathy, Failure to accept responsibility for actions); *Lifestyle* (Need for stimulation/proneness to boredom, Parasitic lifestyle, Lack of realistic long-term goals, Impulsivity, Irresponsibility); and *Antisocial* (Poor behavioral controls, Early behavior problems, Juvenile delinquency, Revocation of conditional release, Criminal versatility). The pattern of correlations among these factors supports the presence of two second-order factors: *Factor 1* (Interpersonal/Affective, 8 items); and *Factor 2* (Lifestyle/Antisocial, 10 items). Elevated scores on Factor 1 or Factor 2 alone are not sufficient to define psychopathy; high scores on both are required (Hare 2003; Hare and Neumann 2008). The overt indices of erratic lifestyle and antisocial behavior as measured by Factor 2 are essential components of the psychopathy construct, not simply correlates (Hare and Neumann 2008; Mokros et al. 2015; Neumann et al. 2014). As put by Lynam and Miller

(2012, p. 342), "if there is an essential behavioral feature in common across the conceptualizations [of psychopathy], it is the presence of ASB [antisocial behavior]. Any description of psychopathy is incomplete without ASB." Below, we discuss this point with reference to the PM-MRV.[1]

Because assessments of psychopathy can have serious consequences in virtually any context—mental health, criminal justice, community, corporate, and so forth—the instrument used for the assessments must meet high psychometric standards. Just as important, those using such an instrument must be qualified to do so. As the international standard for measuring psychopathy, the PCL-R has been subjected to intense psychometric and legal scrutiny. The publisher of the PCL-R, Multi-Health Systems (MHS), has designated it a Qualification Level C instrument, requiring advanced academic training in psychological testing and supervised experience in test administration and interpretation in the form of either a practicum or an internship. Many jurisdictions also require formal licensing by an appropriate board. Unfortunately, these restrictions have not stopped the popular media and internet users from using the PCL-R to construct a variety of quizzes to determine how psychopathic someone might be.

Corporate Psychopathy

There is a very large scholarly literature on the role of psychopathy in the criminal justice and mental health systems. In contrast, empirical research in the business world largely consists mainly of self-report measures of constructs related to psychopathy, such as narcissism, Machiavellianism, and aberrant self-promotion (Babiak 2007; Babiak and Hare 2006; Gustafson and Ritzer 1995; O'Boyle et al. 2012). Among the reasons for this paucity of research is the difficulty in obtaining active cooperation from business organizations, in some cases because of privacy issues and fear of litigation, and in others because of a reluctance to acknowledge and confront the issue of psychopathy in the business world (Heinze et al. 2010). Once again, these issues have not stopped the media and the public from engaging in unbridled speculation about the role of psychopathy in financial and political scandals, Ponzi schemes, fraud, and so forth. Clearly, there is a need

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[1] The three-factor solution of the PCL-R proposed by Cooke and Mich ie (2001) consists of the *Interpersonal*, *Affective*, and *Lifestyle* factors (dimensions), leaving out the *Antisocial* factor. These authors noted that "All three factors are necessary for characterization of the disorder— each factor contributing to the superordinate factor to the same extent" (p. 185). That is, even according to the three-factor model, the PM-MRV leaves out an essential part of the psychopathy construct, namely the *Lifestyle* dimension.

here for empirical research using well-validated methods for assessing psychopathy in corporate settings.

Along these lines, Babiak et al. (2010, p. 174) recently reported that the PCL-R scores of 203 corporate professionals were positively correlated with in-house ratings of charisma/presentation style (creativity, good strategic thinking and communication skills), but negatively correlated with ratings of responsibility/performance (being a team player, management skills, and overall accomplishments). Several individuals had a PCL-R score of 30 or higher, a common threshold for psychopathy. The use of the PCL-R in this context was unusual but fortuitous. Babiak was a consultant for the management development programs of several companies, and had ready access to individuals and enough collateral information to conduct reliable PCL-R assessments.

Few human resources professionals will have the qualifications or the time needed to conduct PCL-R assessments. Thus, we acknowledge a need for reliable and valid measures of corporate psychopathy. For example, the *Business Scan 360* (B-Scan 360, Babiak and Hare 2014) is an instrument in which individuals rate others (e.g., their supervisors, subordinates) on psychopathic features relevant to workplace settings. The B-Scan 360 has the same four-factor structure as the PCL-R (Mathieu et al. 2013) and is predictive of various leadership behaviors (e.g., Mathieu et al. 2014a, b). Because of its close conceptual and empirical ties to the PCL-R, it should prove useful in extending current conceptions of psychopathy to the business world. Other instruments also may emerge and prove useful in corporate settings to assess psychopathy. However, it is incumbent on the developers of such instruments to outline the steps taken to develop them and to demonstrate that they provide reliable and valid measures of the psychopathy construct.

The PM-MRV

At first glance, it appears that Boddy and his colleagues already have provided a measure of psychopathy for corporate settings. Boddy et al. (2010a, p. 134) stated, "A management research tool, the Psychopathy Measure—Management Research version (PM-MRV), in the form of an identification instrument for Corporate Psychopaths, now exists. This is based on the world's most commonly used psychological instrument for identifying psychopaths [the PCL-R] and relies on the reporting of fellow employees. This research tool can be used to identify when psychopathy is present in corporate management." However, this "management research tool" was similar to a quiz in an article titled "Is Your Boss a Psychopath" published in *Fast Company magazine* (Deutschman 2005;

http://www.fastcompany.com/magazine/96/openboss-quiz.html). The quiz in turn was based on the eight items that comprise the Interpersonal and Affective dimensions (Factor 1) of the PCL-R (Hare 2003; Neumann et al. 2007). Deutschman (2005, p. 48) stated that Hare's PCL-R evaluates 20 personality traits and that a subset of eight traits (i.e., Factor 1) defines what Hare calls the "corporate psychopath." The latter part of this statement is incorrect. As noted above, Factor 1 or Factor 2 alone does not define psychopathy. Nonetheless, Deutschman erroneously argued that Hare considered these eight items to be a form of the PCL-R modified (mostly in style of administration) for use in business research.

The PM-MRV consists of these eight items, slightly recast for scoring by business personnel. With reference to these items, Boddy et al. (2010a, p. 5) stated, "Hare says that a subset of his checklist caters for identifying Corporate Psychopaths: they are glib and superficially charming, have a grandiose sense of self-worth, are pathological liars, good at conning and manipulating others, have no remorse about harming others; are emotionally shallow, calculating and cold; callous and lacking in empathy and they fail to take responsibility for their own actions. This set of characteristics has been developed into a measure of the presence of Corporate Psychopaths within organizations, called the 'Psychopathy Measure—Management Research Version' (PM-MRV) (Boddy 2010)." Boddy retained the PCL-R scoring system for each item (0, 1, or 2), and considered a score of 13 (out of 16) to be an indicative of corporate psychopathy.

We leave it to the reader to decide the degree of similarity in wording and content in the PCL-R, the Fast Company quiz, and the PM-MRV (see Table 1). This issue aside, there are concerns about the reliability and validity of the PM-MRV as a measure of psychopathy. The procedures used by Boddy to develop and use the PM-MRV do not appear to be in accord with commonly accepted standards for psychological assessment (Anastasi and Urbina 1997; American Educational Research Association, American Psychological Association, and National Council on Measurement in Education 1999). Thus, it remains unclear to what extent the PM-MRV measures psychopathy and where it fits in the nomological network of the construct.

The Problem for Basic Research

Science cannot progress without reliable and valid measures of the constructs with which it is concerned. Behavioral science in general and psychopathology in particular have had a difficult time in developing sound measures of its constructs. With respect to psychopathy,

Table 1 Items in PCL-R Factor 1, the Fast Company Article, and the PM-MRV

PCL-R	Fast Company	Boddy PM-MRV
1. Glibness/superficial charm	Glib and superficially charming	Glib and superficially charming
2. Grandiose sense of self-worth	Grandiose sense of self-worth	Grandiose sense of self-worth
4. Pathological lying	Pathological liar	Accomplished liars
5. Conning/manipulative	Con Artist/master manipulator	Manipulative and conning
6. Lack of remorse or guilt	Lack of remorse or guilt after harming others	Lack of remorse about how their actions hurt other employees
7. Shallow affect	Shallow affect	Emotionally shallow, calculating, cold
8. Callous/lack of empathy	Callous and lacking in empathy	Lack of empathy; show no capacity to experience the feelings of others
16. Failure to accept responsibility for own actions	Fail to accept responsibility	Refuse to take responsibility for their own actions

PCL-R Factor 2 items are listed in the text of the current article. PCL-R = Psychopathy Checklist-Revised (Hare 1991, 2003); Fast Company = Fast Company Magazine article (Deutschman 2005); PM-MRV = Psychopathy Measure—Management Research Version (Boddy 2010)

the stakes associated with its measurement are high, not only in the criminal justice and mental health systems but increasingly in the corporate world. Development and validation of suitable instruments are not less difficult and important for the latter than for the former. It is scientifically unsound and professionally irresponsible simply to take items from a controlled and well-validated instrument, modify their scoring protocols, and introduce them as a new scale. The fact that the psychometric properties of the PM-MRV are unknown, other than some information about internal consistency, exacerbates the problem. Below, we review several major issues that arise with the "development" and use of the PM-MRV.

Lack of Evidence of Validity

As far as we can determine, even the basic steps needed to establish an instrument's psychometric properties and validity are missing. Messick (1995) outlined a series of steps needed to validate a new instrument, which include establishing convergent, discriminant, and predictive validity. Zumbo (2009) emphasized the need continually to validate assessments, especially when used in novel settings (otherwise referred to as "ecological validity"). However, particularly problematic is the lack of data on the convergent/discriminant validity of the PM-MRV (Hubley and Zumbo 1996). Perhaps most directly, to what extent does the PM-MRV simply measure how much a worker or subordinate likes or dislikes a co-worker or supervisor?

Psychopathy or Dislike?

To investigate this latter point, we conducted a survey of 198 working individuals on Amazon's Mechanical Turk (Mturk), which is a reliable source of participants for this

sort of investigation (Buhrmester et al. 2011; Paolacci et al. 2010). The sample composition was as follows: 53 % female; mean age = 36.2 years (SD = 11.3); median income = \$51,000 to \$65,000 per year; and median education = 4 years of college or university. We asked individuals to rate their supervisor using what has been called the PM-MRV (α = .92), along with basic questions such as "*(My supervisor) is a likeable person*" (reverse scored), "*I like my supervisor*" (reverse scored), and "*I hate my supervisor.*" Each of these items was scored on a five-point scale from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*). These three items formed an internally consistent composite scale (α = .88) for disliking one's supervisor. This scale was strongly correlated with the PM-MRV (r = .78, p < .0001. That is, simply disliking one's supervisor accounted for approximately 63 % of the total PM-MRV variance.

A potential defense of the PM-MRV might be that psychopathic individuals are extremely unlikable, and that the very high PM-MRV dislike correlation is understandable. However, the research literature on people with psychopathy-like traits in the business world suggests otherwise; that is, they often are viewed as engaging and charming in short encounters, usually showing their true colors only over time, through recklessness and broken commitments (e.g., Babiak and Hare 2006; Babiak et al. 2010; Hogan and Hogan 2001). Thus, we collected a second (similar) Mturk sample of 94 workers. We asked the same series of questions, with one additional question: "*How long have you known your current (or most recent) supervisor?*" Presumably, if the PM-MRV is tapping psychopathy, the correlation should be strongest among those who have known their supervisor the longest. The results indicated that the correlation of the PM-MRV with dislike of one's supervisor was similar to the first sample

($r = .84$, $p < .0001$). The amount of time they knew their supervisor had no significant correlation with the PM-MRV ($r = −.14$, $p = .19$). We then conducted a regression analysis with the PM-MRV as the dependent variable and time, dislike, and time × dislike as three predictors. The only predictor of PM-MRV scores was dislike of one's supervisor ($\beta = .83$, $p < .0001$). Thus, it appears that the PM-MRV measures how much individuals like their supervisors.

Conceptual Overlap with Other Dark Personalities

Questions about the origins and legitimacy of the PM-MRV aside, let us assume for the sake of argument that the eight items do provide proxy measures of the eight latent traits that comprise PCL-R Factor 1. They still would be only a slice of the PCL-R psychopathy construct, one that shares definitional and psychometric space with other so-called "dark personalities" (Jones and Figueredo 2013). Research in the area of destructive personalities has identified at least three dark personalities that are relevant to business-related outcomes (O'Boyle et al. 2012; also see Spain et al. 2014). This *Dark Triad* (Paulhus and Williams 2002) consists of Machiavellianism, psychopathy, and narcissism.[2] Members of the Dark Triad share some traits but nonetheless are distinguishable from one another, and each predicts unique outcomes (see review by Furnham et al. 2013). For example, individuals high in Machiavellianism tend to have longer-term goals than do those high in either narcissism or psychopathy (Jones 2014). By contrast, individuals high in narcissism tend to be high in identity strength and to focus on ego-reinforcement, unlike the more instrumental nature of Machiavellianism or the reckless nature of psychopathy (Jones and Paulhus 2011a). O'Boyle et al. (2012, p. 558) described the triad as follows: "Machiavellians' beliefs about the gullibility of others and lack of concern for their rights lead to manipulative behaviors. Narcissists' inflated view of self, coupled with delusions of grandeur, creates a desire to self-promote and engage in attention-seeking behaviors. For those high in psychopathy, a disregard for societal norms is associated with antisocial behavior." A large-scale meta-analysis of the Dark Triad in the workplace (O'Boyle et al. 2012) indicated that the members of the triad differed from one another in their impact on job performance and counterproductive work behavior.

As research increases in business and other relevant applied fields, it is critical to be sure that we are assessing what we claim to assess, a problem for measures that are too broad in their scope. Recent research clearly indicates that Hare's Factor 1 (Interpersonal/Affective) is a common vein that runs through the Dark Triad personalities (Jones and Figueredo 2013). That is, the members of the Dark Triad share the characteristics of superficial charm, selfishness, callous affect, and shallow emotions. Assessments, such as the PM-MRV, that focus on this common vein would produce scores that relate to everything associated with each member of the Dark Triad.

In business, the potential personal and legal implications of a clinical assessment, for both corporations and personnel, can be severe. The problem is even more serious when we do not measure what we purport to measure, a matter of validity. Failure to differentiate among dark personalities and use of an unvalidated measure impedes research and promotes misinformation concerning the role of psychopathy in the business and corporate worlds. Thus, even if the PM-MRV were a reliable indicator of Hare's Factor 1, it still would not be specific to any of the dark personalities.

Boddy (2010) himself pointed out that it is important to distinguish among the dark personalities responsible for diverse forms of corporate misbehavior. The patterns of behavior that arise from these personalities have different signature strategies (Jones 2014a). For example, individuals high in Machiavellianism use long-term deception and cautious planning when executing selfish plans (Jones and Paulhus 2011a). Such individuals are bottom-line focused, and their deception and selfishness is difficult to detect. In fact, some of these individuals may remain dormant with respect to antisocial activity so long as their personal interests coincide with those of the company (Jones 2014a). By contrast, individuals high in psychopathy "Talk the walk" of business (Babiak et al. 2010), exuding charm but engaging in aggressive manipulation and high levels of risk taking.

Narcissism, which is another trait that shares Factor 1 features of callous-manipulation, is strategically different from psychopathy and Machiavellianism. Such individuals use self-deception as their primary mode of manipulation (Paulhus et al. 2003). As von Hippel and Trivers (2011) argue, self-deception is virtually impossible to detect because the individual believes his/her own self-aggrandizing lies. Self-deception is a powerful tool for making good first impressions (Back et al. 2010; Paulhus 1998), especially in job interviews (Paulhus et al. 2013). However, over time, narcissistic self-deception grows tiresome, and holes begin to emerge in the self-aggrandizing claims (Paulhus 1998).

By labeling corporate misbehavior stemming from dispositional "malevolence" as psychopathy, we lose the ability to predict, explain, and control the resulting outcomes, which is the very task of behavioral science.

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[2] Social dominance orientation also is considered to be a dark personality (Jones and Figueredo 2013; Sidanius et al. 2000). Paulhus (2014) recently suggested that everyday sadism may be part of a *Dark Tetrad*.

Individuals high in Machiavellianism may be just as selfish as those high in psychopathy in helping themselves to other people's money or dishonestly benefitting from someone else's loss, provided that conditions are anonymous (Jones 2013). However, unlike those high in Machiavellianism and narcissism, individuals high in psychopathy are likely to engage in short-term gratification and high-stakes risks, even when they clearly face the possibility of future retribution or direct punishment (Babiak et al. 2010; Hare 2003; Jones 2014b).

From the standpoint of unique misbehaviors in the workplace, Machiavellian individuals are cautious and often *do* engage in good citizenship behaviors, when it is visible to supervisors and it benefits them (Bagozzi et al. 2013). Moreover, Machiavellian individuals do not have the dysfunctional levels of impulsivity that are associated with psychopathy (Jones and Paulhus 2011b). Thus, Machiavellian individuals are better suited for long-term deception than are individuals high in psychopathy (Jones 2014a), which would result in different misbehaviors. In contrast, individuals high in narcissism exhibit an overconfident form of impulsivity (Jones and Paulhus 2011b). Thus, their outcomes are likely to be mixed (Paulhus 1998); although there are bright sides to narcissistic overconfidence (Judge et al. 2006), it is associated with a tendency to disregard information from others (Nevicka et al. 2011).

In this way, the traits, goals, methods of manipulation, and strategies related to each dark personality determine the procedures for flagging and dealing with potential organizational harm. Individuals high in Machiavellianism may respond positively and appropriately to the re-alignment of personal goals with organizational ones (e.g., Mehran 1995), which is a required assumption of agency theory (e.g., Wright et al. 2001). In fact, from the perspective of the Machiavellian, corporate and individual re-alignment of goals often serves to facilitate business performance (Zettler and Solga 2013).

With narcissism, ego-reinforcement is the never-ending goal (Morf and Rhodewalt 2001), and as such, individuals perceive others as rivals and threats (Back et al. 2013). Dealing with narcissistic individuals requires careful ego-reinforcement, although meta-analytic evidence suggests that positions of power can lead to increases in interpersonal and organizational harm among individuals high in narcissism (O'Boyle et al. 2012). Because such individuals often rise to power (Judge et al. 2009), it is critical that individuals who exhibit such traits be forced to engage in perspective taking and be required to take subordinate advice into account. For example, research has shown that individuals high in narcissism discount the advice and critical feedback provided to them by individuals in subordinate positions (Nevicka et al. 2011).

Finally, those high in psychopathy are behaviorally inconsistent and antisocial in nature, leading to intimidating and aggressive strategies and abusive environments (e.g., Babiak and Hare 2006; Hare and Neumann 2008; Mathieu et al. 2014a, b). Thus, the attitudes and behaviors of such individuals may be the most difficult to re-align with company or societal goals.

Without information about the features measured by PCL-R Factor 2, it would not be possible to distinguish someone high in psychopathy from someone high in narcissism or Machiavellianism (Holtzman and Strube 2010; Jones and Paulhus 2014). This ambiguity makes it difficult to interpret any of the findings presented by Boddy and his colleagues with respect to corporate psychopathy as defined by the PM-MRV. To take but two examples, PM-MRV scores were negatively correlated with corporate social responsibility (Boddy et al. 2010a) and positively correlated with bullying of employees (Boddy 2014). These and other problematic behaviors are found with all three members of the Dark Triad and are not specific to psychopathy (e.g., Baughman et al. 2012; O'Boyle et al. 2012).

Basic Research Versus Applications

The PM-MRV relies on impressions of an individual formed by others, such as employees or peers. Unlike other assessments, it purports to measure psychopathy but in fact measures features that are common to all members of the Dark Triad. Indeed, factor analyses of the peer observations of the items used to measure the members of the Dark Triad often yield a common "Scoundrel Factor" (Jones 2014). This suggests that observers may perceive an individual as unprincipled, dishonorable, callous, manipulative, or "malevolent," a perception that would apply to various dark personalities and not specifically to psychopathy. This presents a problem for the PM-MRV as a putative measure of psychopathy, for both research and potential applications.

Perhaps, the only goal of the PM-MRV is for basic research on employee impressions about problematic or negative workplace behaviors. However, reference to the PM-MRV as a "research version" suggests that another version may emerge, designed for other corporate purposes, such as personnel selection, conflict resolution, and various management policies and actions dependent on assessments of individuals. The term psychopathy has strong negative connotations concerning the potential for change. Wrongly applied, it could lead to the use of inappropriate and counterproductive corporate interventions. The PM-MRV also seems to identify individuals as psychopathic even when they do not meet the criteria for any of the dark personalities.

Research in psychology has long noted the human tendency to make dispositional attributions to behaviors that often are situational (Kelley 1967). Many investigators refer to this fundamental flaw in interpersonal perceptions as the *Fundamental Attribution Error* (e.g., Jellison and Green 1981). As indicated in the Mturk study described above, the PM-MRV to a large degree reflects how much employees like or dislike their supervisors. More generally, it is possible that individuals with personal disputes and conflicts with co-workers express their personal issues by rating their co-workers as having the character flaws associated with a high score on the PM-MRV. For example, an insecure or disgruntled co-worker (e.g., Harms 2011) who completes the PM-MRV on a supervisor or co-worker might rate them high on psychopathic traits. Similarly, a co-worker or supervisor who is dominant, reactive, and argumentative (e.g., Mathisen et al. 2011) might be scored by others as psychopathic. In each case, the inappropriate use of the construct psychopathy might generate or worsen a workplace problem.

The Legal Implications of Misspecification

Psychological constructs have carefully carved boundaries discussed and negotiated by researchers. A disregard for these empirical boundaries leads to "construct creep" and over-inclusive definitions of traits, mitigating their utility. However, even when armed with clear definitions of these traits, their assessments need both empirical support and ecological validation in order to ensure proper assessment of the construct in given settings. By-passing these steps for the sake of face validity not only compromises the scientific literature but has real-world ramifications in which individuals who have done nothing wrong may be placed at risk for termination, counseling, or disciplinary action. Although some individuals may create workplace conflict and problems, many or even most are not psychopathic (Spain et al. 2014).

This is more than an academic issue; an instrument based on a misreading of the theoretical and empirical literature, and that uses inadequate or faulty information to measure psychopathy, can have unfortunate consequences for both the individual and the corporation.

The Red-flag of Over-diagnosis

Boddy et al. (2010b) had individuals use the PM-MRV to indicate if they had ever worked with, or currently are working with, "a manager who could be classed as a Corporate Psychopath" (p. 127), based on a score of 13 on the 16-point scale. The authors (p. 128) reported that 27.4 % of professional workers, 24.2 % of managerial workers, and 14.8 % of clerical and other junior workers

had "experienced corporate psychopaths in the workplace." They concluded that "a psychopathy scale identified greater levels of psychopathy at more senior levels of corporations than at more junior levels" (p. 121). This conclusion is difficult to justify, for several reasons. First, the "experience of corporate psychopaths" was related directly to the number of years in the workplace, suggesting that those in higher management levels had more opportunities to come across a corporate psychopath. Second, having experienced a corporate psychopath at some time in one's career is not the same as the prevalence of psychopathy at a given managerial level. Third, the estimates of the prevalence of corporate psychopathy were remarkably high, even if we were to assume that the PM-MRV is an adequate measure of psychopathy. In their study of corporate professionals Babiak et al. (2010) found that the vast majority of the 203 participants had a very low PCL-R score ($M = 3.6$, $SD = 7.3$), with only eight (3.9 %) having a score at or above the research threshold for psychopathy of 30. Further, the PCL-R score was unrelated to the level of executive/management position. Finally, we have no way of knowing to what extent the use of the PM-MRV confounded psychopathy with other dark personalities, especially Machiavellianism and narcissism. For example, Machiavellianism is more likely than is psychopathy to be associated with the impulse control and long-term self-interests necessary to obtain high-level positions (Jones and Paulhus 2009). Curiously, Boddy (2010, 2011) has discussed the similarities and differences among the members of the Dark Triad. However, at best, the PM-MRV only assesses their similarities.

Conclusions

Disentangling psychopathy, narcissism, Machiavellianism, and other dark personalities is critical to advancing research on corporate harm. The PM-MRV may assess only features common to these dark personalities and therefore cannot provide essential information about how they differ with respect to their nature, the strategies they use, and their dispositions toward corporate misbehavior. As a research tool, the PM-MRV is not specific with respect to psychopathy and provides misleading information about the role of the PCL-R psychopathy construct in the business world. The real danger is that executives or human resources personnel will use it make decisions about individual employees.

Future research should continue to focus on assessing dispositionally destructive personalities in the workforce. However, it is critical that the instruments used for these assessments undergo the same rigorous validation procedures as other assessments in the field of psychopathy, and

that they be *ecologically* valid for the context in which they are used. Further, these assessments should take into account the overlapping and distinctive traits that surround psychopathy in personality space, such as Machiavellianism and narcissism. This latter recommendation is critical because these personalities have differential consequences for the corporate world.

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