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SPECIAL ISSUE ARTICLE

Rule breakers and attention seekers: Personality predictors of integrity and accountability in leaders*

Kimberly S. Nei | Jeff L. Foster | Alisha M. Ness | Darin S. Nei

¹Hogan Research Division, Hogan Assessment Systems, Tulsa, Oklahoma

Correspondence

Kimberly S. Nei, Hogan Assessment Systems, 11 South Greenwood, Tulsa, OK 74120. Email: knei@hoganassessments.com

Present address

Alisha M. Ness, U.S. Army Research Institute for the Behavioral and Social Sciences, Ft Belvoir, Virginia Unethical leadership behavior can encourage follower CWBs and have costly organizational impacts. In this meta-analysis, we use data from 3,000 managers and executives to identify antecedents of ethical behaviors: integrity and accountability. Results suggest that many five factor model (Big Five) personality scales, personality derailers (dark side attributes), and values predict integrity and accountability. Leaders who are more conscientious, professional, and rule following and less attention seeking receive higher ratings of integrity and accountability. The strongest relationships were often for personality derailers (Excitable, Leisurely, Mischievous, Imaginative). Values and preferences (Aesthetics, Hedonism, Recognition) also had notable relationships. We discuss our results and their implications for organizations seeking to reduce CWBs, promote OCBs, or establish a climate of ethical behavior.

1 | INTRODUCTION

When a firm gets caught engaging in unethical conduct, their reputation suffers and they can lose up to 41% of their market value (Karpoff, Lee, & Martin, 2008). Public scandals force the collapse of companies like Enron, WorldCom, and Bear Stearns, and unethical behavior can have disastrous effects on the entire economy as demonstrated by the recent financial crisis. But unethical behavior does not just damage the organization; it can also negatively impact the daily lives of all of its employees.

Why would leaders engage in unethical behavior? Such behavior is often attributed to a variety of factors that fall within three areas: (a) the environment, such as perceived threats and a lack of checks and balances, (b) follower characteristics, such as a willingness to conform and collude with leaders, and (c) characteristics of the leader, such as narcissism or a need for power (Padilla, Hogan, & Kaiser, 2007). However, most research on unethical leader behavior derive from anecdotal evidence or data examining a limited number of variables or samples. This calls into question the degree to which such findings generalize across companies and settings. In this study, we use data from over 3,000 managers and executives, representing a diverse sampling of organizations and industries, to identify personality characteristics and individual values that predict ratings of ethical leadership behaviors such as integrity and accountability.

2 | THE IMPACT OF ETHICAL LEADERSHIP BEHAVIOR

A number of researchers have described the behavior of ethical leaders, often focusing on the impact such leaders have on their followers and the choices said followers make. While ethical leaders act with the best interest of their followers, they also act with the best interest of their stakeholders and clients (Gini, 1997; Kanungo, 2009). Ethical leaders are honest and transparent in their actions, and promote ethical behavior in followers through two-way communication and reinforcement (Brown, Treviño, & Harrison, 2005). Similarly, during structured job analyses, subject matter experts often rate trustworthiness and integrity as top competencies for leaders across organizations and industries (Nei & Pickering, 2015).

Furthermore, when faced with ethical dilemmas, employees often rely on their leaders for guidance (Treviño, 1986). According to Mayer, Kuenzi, Greenbaum, Bardes, and Salvador (2009), ethical leadership from both top management and immediate supervisors is negatively related to group-level deviance. In other words, employees often conform to the ethical values of their leaders (Schminke, Wells, Peyrefitte, & Sebora, 2002).

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Followers conforming to ethical values of their leaders can have a number of benefits. Mayer et al. (2009) showed that leaders who were perceived as ethical had a positive influence on employee productivity. Researchers have also linked ethical behavior in leadership to follower perceptions of leader effectiveness, follower job satisfaction, follower dedication, and follower willingness to report problems to management (Brown et al., 2005). Piccolo, Greenbaum, Den Hartog, and Folger (2010) showed that ethical leaders increased employees' task significance, which resulted in improved performance.

Ethical behavior in leaders can also help mitigate the impact of negative outcomes. For example, both Brown and Treviño (2006b) and Mayer et al. (2009) found that ethical leadership behavior resulted in decreased counterproductive work behaviors (CWBs) among employees. Stouten et al. (2010) argue that ethical leaders discourage deviant behavior through balancing workload and improving job design. Conversely, unethical leaders are more likely to have higher rates of CWBs in followers (Detert, Treviño, Burris, & Andiappan, 2007).

Given the importance of leader behavior, organizations are increasingly using assessments to help identify future leaders and develop current leaders (Church & Rotolo, 2013; Church, Rotolo, Ginther, & Levine, 2015). Therefore, it is critical to identify the individual characteristics and values that predict ethical leadership to assist in such efforts and promote organizational success. First, however, we must define what we mean by ethical leadership behavior.

3 | MEASURING INTEGRITY AND ACCOUNTABILITY AS TYPES OF ETHICAL BEHAVIOR

One issue plaguing the literature on ethical behavior is an inconsistency in definitions and measurement. Definitions of ethical leadership often focus on various aspects of ethical behaviors, such as using power to benefit others and the organization (e.g., Gini, 1998; Kanungo, 2009) or demonstrating appropriate conduct within interpersonal relations (e.g., Brown et al., 2005). Some definitions focus on describing unethical leadership. Definitions include being self-absorbed and manipulative (e.g., Howell & Avolio, 1998) or even despotic, domineering, controlling, and vengeful (e.g., House & Howell, 1992). In our study, we adopt the foundation outlined by Brown and Treviño (2006a) by focusing on two aspects of trustworthiness. The first aspect is acting with honesty and integrity, which we simply refer to as 'integrity', and the second aspect is performing work in a professional, responsible, and dependable manner, which we label 'accountability'.

Several researchers (Den Hartog et al., 1999; Kirkpatrick & Locke, 1996; Lord, Foti, & De Vader, 1984; Posner & Schmidt, 1992) have found that perceived leader effectiveness is correlated with perceptions of a leader's honesty, integrity, and trustworthiness. Furthermore, during interviews, subordinates have identified the personal characteristics of honesty and trustworthiness as key elements of ethical leadership (Brown et al., 2005; Treviño, Brown, & Hartman, 2003; Treviño, Hartman, & Brown, 2000).

Ethical leaders treat employees in a fair and respectful way, which creates a trusting environment that positively influences employees' satisfaction and dedication (De Hoogh & Den Hartog, 2008; Weaver, Treviño, & Agle, 2005). As a result, ethics has been identified as the single best predictor of trust in leaders, accounting for 62.5% of the variance in trust (Craig & Gustafson, 1998). When followers view their leaders as trustworthy, they report higher job satisfaction and greater organizational commitment (Dirks & Ferrin, 2002). Therefore, we argue that our two components of trustworthiness, (a) integrity and (b) accountability, serve as key elements in evaluating a leader's ethical behavior.

Research has linked Integrity tests to a variety of outcomes relating to job performance and CWBs (Ones & Viswesvaran, 2007; Ones, Viswesvaran, & Schmidt, 1993, 2003; Palanski & Yammarino, 2009). For example, Hogan and Hogan (1989) used a personality-based measure of integrity called the Reliability scale to predict CWBs including absenteeism, excessive grievances, bogus worker compensation claims, temper tantrums, insubordination, negative sanctions, and delinquency, as well as supervisor ratings of honesty and dependability. Although integrity tests are useful, they are not necessarily the best method for predicting ethical behavior in leaders. Stamoulis (2009) found that traditional integrity tests (especially overt tests) do not work well with leaders as they focus on counterproductive behaviors of lower level employees (e.g., stealing office supplies). Thus, although researchers have found that organizations can use integrity tests to decrease CWBs in organizations (Ones et al., 1993), organizations may not want to use them for leadership positions due to face validity and content coverage considerations.

In addition, Hogan and Ones (1997) indicate that integrity tests measure three core dimensions of the Five-Factor Model (FFM) of personality: conscientiousness, agreeableness, and emotional stability. Therefore, we examine these three constructs to capture integrity in the current study. Furthermore, we build on previous research using integrity tests and individual scales like Reliability (Hogan & Hogan, 1989) by examining a variety of additional personality and values measures using multiple outcomes.

4 | ANTECEDENTS OF ETHICAL LEADERSHIP

4.1 | Personality and ethical behavior

Most personality-related research in the last 20 years has used the FFM (cf. Digman, 1990; Goldberg, 1992; John, 1990; McCrae & Costa, 1987) as a framework for organizing and comparing results from different personality instruments. The FFM includes five dimensions: (a) emotional stability—the tendency to appear calm and collected, even during times of stress, (b) extraversion—which involves being outgoing, energetic, and social, (c) agreeableness—acting warm and friendly toward others, (d) conscientiousness—which involves a preference for structure and rules, and (e) openness—being creative and open to new ideas and experiences.

Researchers have found links between FFM personality scales and a number of outcomes related to ethical behavior. For example, studies show that conscientiousness is positively related to integrity (Murphy, 2000; Ones et al., 1993). Conscientiousness is also negatively related to CWBs (Berry, Ones, & Sackett, 2007; Cohen, Panter, Turan, Morse, & Kim, 2014) and appears to mitigate the relationship between work stressors and CWBs (Bowling & Eschleman, 2010). However, the relationship between conscientiousness and ethical behavior might be more complex, as Penney, Hunter, and Perry (2011) found that the relationship between conscientiousness and CWBs was moderated by an individual's level of emotional stability. Further, they found the relationship between conscientiousness and CWB also varied as a function of organizationally provided resources. This may suggest that the relationship between conscientiousness and ethical behavior may vary by employment level if dependent on varying organizational needs. This emphasizes the value of using managerial samples when examining antecedents of ethical leadership.

Researchers have also found relationships between agreeableness and various behaviors relating to ethical leadership, such as positive relationships with ethical decision making (Antes et al., 2007) and ratings of integrity (Ones & Viswesvaran, 1998), as well as negative relationships with CWBs (Berry et al., 2007). Similarly, studies have also tied emotional stability (Berry et al., 2007; Ones & Viswesvaran, 1998), extraversion (Cohen et al., 2014; O'Fallon & Butterfield, 2011), and openness (Antes et al., 2007) to a variety of outcomes relating to ethical leadership behavior.

4.2 Derailers and ethical behavior

Personality derailers represent strategies individuals use when interacting with others that, while often beneficial, may ultimately hurt relationships when used too frequently (Benson & Campbell, 2007). Overreliance on these strategies, which is most common during times of stress or when a person stops self-monitoring, can ultimately hinder one's job performance and career. For example, although it is often beneficial to question assumptions and scrutinize the rationale behind major organizational decisions, repeatedly questioning others may result in a reputation for being overly critical and difficult to work with.

As with FFM instruments, a number of researchers have examined relationships between derailers and ethical behavior. Although there remains a lack of consistency concerning the definition and structure of derailers (Foster & Gaddis, 2014), most researchers have used instruments developed to measure the dark triad (Furnham, Richards, & Paulhus, 2013; Wu & Le Bretton, 2011) or scales representing normal behavior in working adults that align with personality disorders in clinical samples (e.g., Guenole, 2014; Hogan & Hogan, 2009).

For example, using meta-analysis, O'Boyle, Forsyth, Banks, and McDaniel (2012) found the dark triad personality traits (Machiavellianism, narcissism, and psychopathy) were associated with CWBs. More specifically, Antes et al., (2007) found characteristics influencing selfperceptions and perceptions of others, such as narcissism and cynicism, were related to ethical decision making. Furthermore, they found these relationships were stronger and more consistent than relationships with FFM personality characteristics (e.g., agreeableness, conscientiousness). Detert, Treviño, and Sweitzer (2008) found cynicism was also related to moral disengagement. Examining more specific International Journal of **SELECTION AND ASSESSMENT**

outcomes, researchers have linked Machiavellianism to a willingness to pay illegal kickbacks (Hegarty & Sims, 1978) and to lie in sales situations (Ross & Robertson, 2000).

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Using scales that align with personality disorders, Gaddis and Foster (2015) explored data from samples representing a variety of jobs and job levels to examine relationships between a number of personality scales from the Hogan Development Survey (HDS) (Hogan & Hogan, 2009) and outcomes related to ethical behavior. They found that trustworthiness ratings were negatively related to a number of derailers, including drawing attention to oneself (HDS Colorful), overconfidence (HDS Bold), and creative thinking (HDS Imaginative). Creative thinking was also one of the strongest negative predictors of dependability ratings, along with being critical of others (HDS Skeptical) and being passive-aggressive (HDS Leisurely). These results suggest that beyond FFM scales, a number of personality derailers may also predict ethical leadership behavior if evaluated using only managerial and executive samples.

4.3 Values and ethical behavior

Holland (1985) noted that an organization's culture reflects the interests and values of its employees. Although this is especially true for leadership, researchers have devoted relatively little attention to relationships between leadership values and ethical behavior.

Using diverse samples, Cohen et al. (2014) found that employees with low moral character engaged in CWBs more frequently and organizational citizenship behaviors (OCBs) less frequently than employees with high moral character. Similarly, Watson and Berkley (2009) found that individuals who value traditionalism, conformity, and stimulation were more likely to be complicit in unethical decision making. Furthermore, when rewards are high, individuals high in hedonism and need for power were more likely to be influenced to act unethically (Watson, Berkley, & Papamarcos, 2009).

Focusing on leadership samples, Mayer, Aquino, Greenbaum, and Kuenzi, (2012) found that an ethical leader's personal values are an integral part of their social identity and help them be a moral person. Furthermore, De Hoogh and Den Hartog (2008) found a leader's social responsibility, conceptualized in terms of feeling obligated to moral and legal rules, being concerned about followers, being aware about the consequences of one's behavior, and self-judgment, predicted ethical leadership. Overall, these findings suggest that, along with personality characteristics, individual values and interests may also predict ethical leadership behavior.

5 | CURRENT STUDY

We sought to examine the personality characteristics and values that are related to ratings of ethical leadership behavior such as integrity and accountability. Although previous researchers have examined a variety of personality and values as potential antecedents of *ethical leader behavior*, none have focused on FFM personality, derailers, and values together using a diverse range of samples representing a variety of organizations and industries. Furthermore, we focus specifically on

HPI scale	Concerns seeming	FFM construct
Adjustment	Steady in the face of pressure.	Emotional stability
Ambition	Appearing leader-like, status-seeking, and achievement-oriented.	Extraversion
Sociability	Needing and/or enjoying social interaction.	Extraversion
Interpersonal sensitivity	Having social sensitivity, tact, and perceptiveness.	Agreeableness
Prudence	Conforming, dependable, and has self-control.	Conscientiousness
Inquisitive	Imaginative, adventurous, and analytical.	Openness
Learning approach	Enjoying academic activities and valuing education as an end in itself.	Openness

managerial and executive samples and include supervisor ratings as our criteria, which are comprised of items assessing both integrity and accountability. We account for individual study artifacts by metaanalyzing results across samples comprised of thousands of leaders from nearly thirty organizations.

While the available research is limited, there appear to be two general themes. First, conscientiousness is positively related to ethical behavior (Brown & Treviño, 2006a). Second, unethical leaders use various methods of manipulating and attention seeking behavior as an abuse of power (O'Boyle et al., 2012). Based on these conclusions, we hypothesize the scales most closely aligned with these two themes from each assessment will be most significantly related to ratings of integrity and accountability in leaders.

> Hypothesis 1 Leaders who are more conscientious, professional, and rule following (i.e., higher Prudence, lower Mischievous, lower Hedonism) will be rated as displaying more integrity and accountability.

> **Hypothesis 2** Leaders who are less attention seeking (i.e., lower Sociability, lower Colorful, lower Recognition) will be rated as displaying more integrity and accountability.

Beyond these hypotheses, we are largely treating this research as exploratory given the lack of available research using managerial and executive samples to use as a foundation. Furthermore, we want to examine a broader range of variables than available in the literature. We will compare our findings with previous research, when available, in the discussion.

6 | METHOD

6.1 Samples

We obtained data from the Hogan archive (Hogan Assessment Systems, 2016b), which contains data from over 400 local validation studies representing a variety of jobs, organizations, industries, and countries. For inclusion, each study had to meet a set of criteria. First, samples had to be comprised of only working adults in leadership positions. Second, these leaders had to have completed at least one of our predictor instruments. Third, immediate supervisors had to have rated these leaders on at least one item relating to integrity or accountability. We identified 28 independent samples (total N = 3,496) that met these criteria. Furthermore, Hunter and Schmidt (2004) point out that meta-analytic result can be biased unless each sample contributes independent data to each analysis. To eliminate nonindependence bias, Subject Matter Experts (N = 3) trained in test validation and certified in the HPI, HDS, and MVPI reviewed and selected the single item that best represented the construct for each study.

6.2 | Measures

6.2.1 | FFM personality

We used the Hogan Personality Inventory (HPI) to assess normal personality characteristics. The HPI is a FFM assessment specifically designed to measure personality in a work-related context. It contains 206 true/false items, is written at a fourth grade reading level, and typically takes 15–20 min to complete. It is comprised of seven primary scales and 42 Homogeneous Item Composites (HICs) or personality facets. The *Hogan Personality Inventory Manual* (Hogan & Hogan, 2007) describes the development, reliability, validity, and appropriate use of the HPI. Table 1 lists the seven HPI scales and their relationships to each component of the FFM.

6.2.2 | Derailers

These have also been referred to as dark-side personality attributes in the literature. We assessed derailers using the Hogan Development Survey (HDS). The HDS is a 168-item self-report assessment that contains 11 primary scales using a true/false response format. The HDS scales index behavioral tendencies that can emerge and negatively impact performance, particularly when an individual is fatigued, ill, stressed, bored, or lacking social vigilance. The *Hogan Development Survey Manual* (Hogan & Hogan, 2009) describes the development, reliability, validity, and appropriate use of the HDS. Table 2 lists the 11 HDS scales.

6.2.3 | Values

We assessed values using the Motives, Values, Preferences Inventory (MVPI). The MVPI contains 200 items representing 10 scales with response options of agree, uncertain, and disagree. The MVPI is an

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TABLE 2 HDS scales and definitions

HDS scale	Concerns seeming
Excitable	Volatile and inconsistent, being enthusiastic about new persons or projects and then becoming disappointed with them.
Skeptical	Cynical, distrustful, overly sensitive to criticism, and questioning others' true intentions.
Cautious	Resistant to change and reluctant to take even reasonable chances for fear of being evaluated negatively.
Reserved	Socially inept and lacking interest in or awareness of the feelings of others.
Leisurely	Autonomous, indifferent to other people's requests, and becoming irritable when they persist.
Bold	Unusually self-confident and, as a result, unwilling to admit mistakes or listen to advice, and has difficulty learning from experience.
Mischievous	To enjoy taking risks and testing the limits.
Colorful	Expressive, dramatic, and wanting to be noticed.
Imaginative	To act and think in creative and sometimes unusual ways.
Diligent	Careful, precise, and critical of the performance of others.
Dutiful	Eager to please, reliant on others for support, and reluctant to take independent action.

indicator to what serves as a motivator for individuals. The *Motives*, *Values*, *Preferences Inventory Manual* (Hogan & Hogan, 2010) describes the development, reliability, validity, and appropriate use of the MVPI. Table 3 lists the 10 MVPI scales.

6.2.4 | Ethical leadership behavior

Because we used multiple samples with different performance rating forms, items assessing integrity and accountability often varied across studies. To identify criterion items for our analyses, we used existing items coded by subject matter experts as relating to two dimensions of the Hogan Competency Model (Hogan Assessment Systems, 2016a). This model serves as a taxonomy for mapping to organizational competency models for the purpose of identifying similar items from job performance rating forms across different studies. For the current study, we selected items that mapped to two competencies in the model: integrity, defined as 'act's honestly in accordance with moral or ethical principles' and accountability, defined as 'accepts responsibility for one's actions regardless of outcomes'. Table 4 presents sample items for each.

TABLE 3 MVPI scales and definitions

MVPI scale	Concerns valuing
Aesthetics	Creative and artistic self-expression.
Affiliation	Frequent and varied social interaction.
Altruistic	Actively helping others and improving society.
Commerce	Business activities, money, and financial gain.
Hedonism	Fun, good company, and good times.
Power	Competition, achievement, and being influential.
Recognition	Fame, visibility, and publicity.
Science	Ideas, technology, and rational problem solving.
Security	Certainty, predictability, and risk free environments.
Tradition	History, rituals, and old-fashioned virtues.

6.3 | Procedure

To examine relationships between personality, values, and ratings of integrity and accountability, we used meta-analytic procedures outlined by Hunter and Schmidt (2004) to analyze results across studies and assess effect sizes. We used a random-effects model, allowing the population parameter to vary from study to study. This model allows for the possibility that relationships between variables vary across jobs and organizations. As a result, we were able to present both confidence intervals (CI) and credibility intervals (CV). All studies used zero-order product-moment correlations and we corrected each for sampling error, criterion unreliability, and range restriction.

Supervisor ratings of job performance lack perfect reliability, which attenuates correlations between predictors and measures of job performance. Correcting for unreliability allows us to estimate the true relationship between predictors and criteria. Unfortunately, we do not have multiple raters within each study to allow us to compute interrater reliability and account for variability in criterion reliability across studies. Therefore, we followed procedures outlined by Barrick and

 TABLE 4
 Sample performance items coded as integrity and accountability

oning

Accepts personal accountability for actions regardless of outcomes

Accepts personal responsibility

HPI scale	k	Ν	R _{sw}	$SD_{\rm sw}$	ρ	SD_{p}	% Var	80% CV LB	80% CV UB	95% CI LB	95% CI UB
Adjustment	28	3,496	.12	.16	.17	.22	30%	05	.28	.06	.18
Ambition	28	3,496	.03	.20	.04	.28	18%	20	.26	04	.10
Sociability	28	3,496	06	.09	09	.12	100%	06	06	10	03
Interpersonal sensitivity	28	3,496	.06	.15	.08	.21	31%	11	.22	.00	.11
Prudence	28	3,496	.10	.09	.14	.12	95%	.09	.12	.07	.14
Inquisitive	28	3,496	03	.11	05	.15	62%	12	.05	08	.01
Learning approach	28	3,496	.03	.09	.04	.13	91%	.00	.05	01	.06

Note. Results corrected for range restriction and criterion unreliability.

Abbreviations: k = Number of studies; N = Sample size; R_{sw} = Sample-weighted mean correlation; SD_{sw} = Sample-weighted standard deviation; ρ = Operational validity; SD_p = Standard deviation; % Var = Percent of variance accounted for by sampling error and artifact corrections; 80% CV LB = lower 10% boundary of 80% Credibility Interval; 80% CV UB = upper 10% boundary of 80% Credibility Interval; 95% CI LB = lower 2.5% boundary of 95% Confidence Interval; 95% CI UB = upper 2.5% boundary of 95% Confidence Interval.

Operational validities exceeding .10 in absolute value in bold.

Mount (1991) and Tett, Jackson, and Rothstein (1991), and used the average supervisor interrater reliability coefficient of .52 proposed by Viswesvaran, Ones, and Schmidt (1996) to correct for unreliability in the criterion. We did not, however, correct for unreliability in predictor scores. Although predictor measures also lack perfect reliability, our objective was to determine how well assessments used in real-world settings could predict unethical leadership behavior. Our results, therefore, reflect operational validities, or the degree to which each assessment scale predicts actual job performance free of measurement error.

Finally, we computed a range restriction index for HPI, HDS, and MVPI scales. Following procedures described by Hunter and Schmidt (2004), we divided each scale's within-study standard deviation by the scale's standard deviation from an archival sample of people used to create a globally representative norm (HPI N = 145,782; HDS N = 67,582; MVPI N = 48,267). This procedure produced an index of range restriction for each scale within each study and we used these values to correct each predictor scale for range restriction.

7 | RESULTS

Table 5 presents meta-analysis results concerning relationships between HPI scales and ratings of integrity and accountability in leaders. Consistent with our first hypothesis, Prudence (FFM Conscientiousness) has a positive relationship with integrity and accountability ratings ($\rho = .14$). While not sizable, Sociability (FFM

TABLE 6 Meta-analysis estimates of HDS scales for predicting integrity and accountability (ethical behavior) ratings

HDS scale	k	N	R _{sw}	$SD_{\rm sw}$	ρ	$SD_{\rm p}$	% Var	80% CV LB	80% CV UB	95% CI LB	95% CI UB
Excitable	19	2,487	12	.16	17	.22	26%	29	.05	19	05
Skeptical	19	2,487	07	.11	09	.15	66%	14	.01	12	02
Cautious	19	2,487	.00	.14	.01	.20	35%	14	.15	06	.07
Reserved	19	2,487	.01	.10	.02	.14	70%	05	.08	03	.06
Leisurely	19	2,487	11	.13	15	.17	46%	22	.00	17	05
Bold	19	2,487	05	.08	06	.11	100%	05	05	08	01
Mischievous	19	2,487	14	.10	19	.14	76%	19	08	18	09
Colorful	19	2,487	06	.08	08	.11	100%	06	06	09	02
Imaginative	19	2,487	10	.10	14	.13	79%	15	05	14	06
Diligent	19	2,487	.04	.11	.06	.16	57%	05	.13	01	.09
Dutiful	19	2,487	.01	.13	.02	.18	46%	10	.13	05	.07

Note. Results corrected for range restriction and criterion unreliability.

Abbreviations: k = Number of studies; N = Sample size; R_{sw} = Sample-weighted mean correlation; SD_{sw} = Sample-weighted standard deviation; ρ = Operational validity; SD_{p} = Standard deviation; % Var = Percent of variance accounted for by sampling error and artifact corrections; 80% CV LB = lower 10% boundary of 80% Credibility Interval; 80% CV UB = upper 10% boundary of 80% Credibility Interval; 95% CI LB = lower 2.5% boundary of 95% Confidence Interval.

Operational validities exceeding .10 in absolute value in bold.

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 TABLE 7
 Meta-analysis estimates of MVPI scales for predicting integrity and accountability (ethical behavior) ratings

MVPI scale	k	N	R _{sw}	SD _{sw}	ρ	$SD_{\rm p}$	% Var	80% CV LB	80% CV UB	95% CI LB	95% CI UB
Aesthetics	13	1,781	07	.12	10	.17	46%	18	.04	14	.00
Affiliation	13	1,781	02	.06	03	.09	100%	02	02	06	.01
Altruism	13	1,781	01	.10	02	.13	77%	06	.04	07	.04
Commerce	13	1,781	.01	.09	.01	.13	87%	02	.04	04	.06
Hedonism	13	1,781	10	.10	14	.13	77%	15	06	16	05
Power	13	1,781	04	.11	06	.16	56%	13	.05	10	.02
Recognition	13	1,781	12	.10	16	.14	70%	18	06	17	06
Science	13	1,781	07	.07	09	.10	100%	07	07	11	02
Security	13	1,781	.06	.10	.08	.14	75%	.00	.11	.00	.11
Tradition	13	1,781	.00	.09	.00	.13	80%	05	.04	06	.05

Note. Results corrected for range restriction and criterion unreliability.

Abbreviations: k = Number of studies; N = Sample size; $R_{sw} =$ Sample-weighted mean correlation; $SD_{sw} =$ Sample-weighted standard deviation;

 ρ = Operational validity; SD_p = Standard deviation; % Var = Percent of variance accounted for by sampling error and artifact corrections; 80% CV

LB = lower 10% boundary of 80% Credibility Interval; 80% CV UB = upper 10% boundary of 80% Credibility Interval; 95% CI LB = lower 2.5% boundary of 95% Confidence Interval; 95% CI UB = upper 2.5% boundary of 95% Confidence Interval.

Operational validities exceeding .10 in absolute value in bold.

Extraversion) had a notable negative relationship ($\rho = -.09$) with ratings of integrity and accountability. This provides limited support for our second hypothesis. Surprisingly, Adjustment (FFM Emotional Stability) had a stronger positive correlation with our criteria ($\rho = .17$). No other HPI scale had a sizable relationship with integrity and accountability ratings, although the magnitude of the relation for Interpersonal Sensitivity (FFM Agreeableness; $\rho = .08$) was notable as well. Overall, these results provide partial support for our hypotheses that individuals who are more conscientious, professional, and less attention seeking, as indicated by FFM personality scales, will be viewed as displaying more integrity and accountability.

Table 6 presents meta-analysis results concerning the relationship between HDS scales and ratings of integrity and accountability in leaders. Consistent with our first hypothesis, Mischievous ($\rho = -.19$) had a negative relationship with ratings of integrity and accountability in leaders. While not sizable, Colorful also had a negative relationship ($\rho = -.08$) with ratings of integrity and accountability. This provides limited support for our second hypothesis. A number of additional HDS scales also had negative relationships with our criteria, including Excitable ($\rho = -.17$), Leisurely ($\rho = -.15$), and Imaginative ($\rho = -.14$). These results indicate that a variety of derailers impact supervisory perceptions of integrity and accountability in leaders. Overall, these results provide partial support for our hypotheses that leaders who follow rules and avoid seeking attention, as indicated by derailers, will be viewed as displaying more integrity and accountability.

Table 7 presents meta-analysis results concerning the relationship between MVPI scales and ratings of integrity and accountability in leaders. Results support both hypotheses, with Hedonism ($\rho = -.14$) and Recognition ($\rho = -.16$) having negative relationships with ratings of integrity and accountability. Aesthetics ($\rho = -.10$) also had a negative relationship with ratings of integrity and accountability. Similarly, the magnitude of the relationships with Security ($\rho = .08$) and Science ($\rho = -.09$) were also notable. These results provide support for our hypotheses that leaders who are rule following, professional, and deflect personal praise, as indicated by a values measure, will be viewed as displaying more integrity and accountability.

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It is also worth noting that the percentage of variance accounted for across our samples was below 100% for all but five of our metaanalyses using scales from all three predictor instruments. Further, although we found small effect sizes for several scales, the wide credibility intervals for many may indicate that the relationships between these scales and ratings of integrity and accountability likely vary across samples (Wiernik, Kostal, Wilmot, Dilchert, & Ones, 2017). Those with wider credibility intervals will be less generalizable and may have the potential for moderators.

8 DISCUSSION

Identifying ethical leaders is not only crucial for organizations, but can benefit our society and economy as a whole. Although much of the literature has focused on the relationship between personality and ethical behavior (Hogan & Hogan, 1989), very little has explored this relationship with multiple predictors and diverse leadership samples. Our results suggest that a number of (a) broad, FFM personality scales, (b) personality derailers, and (c) values and interests predict perceptions of ethical leadership behaviors such as integrity and accountability.

For the most part, our results are consistent with previous research using a variety of predictor scales regardless of organizational level. We found that leaders who are more conscientious, professional, and rule following (higher HPI Prudence, lower HDS Mischievous, lower MVPI Hedonism) as well as less attention seeking (lower MVPI Recognition and to some extent lower HPI Sociability and lower HDS Colorful) are likely to be perceived as displaying more integrity and accountability.

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Furthermore, consistent with some previous research, those who are emotionally stable (higher HPI Adjustment, lower HDS Excitable), indifferent to others' requests (lower HDS Leisurely), and practical and sensible (lower HDS Imaginative) are also perceived as displaying more integrity and accountability (Antes et al., 2007; Gaddis & Foster, 2015). This suggests that those who are calm, resilient, sensible, and straightforward in their communication will be perceived as behaving more ethically.

Across the three predictor instruments, we also found the strongest and most frequent relationships between dark-side personality characteristics and perceptions of integrity and accountability. This is consistent with Antes et al. (2007) findings that narcissism and cynicism had stronger and more consistent relationships with ethical decision making than FFM personality characteristics (e.g., agreeableness, conscientiousness). This may suggest that organizations should focus more attention on screening out potential leaders based on their derailing personality characteristics or using integrity measures targeting managerial jobs and executives. Alternatively, or additionally, this should be a key area of leadership development.

As expected, leaders who value a professional environment (lower MVPI Hedonism) and do not seek credit for their work (lower MVPI Recognition) are likely to be perceived as displaying more integrity and accountability. These leaders are more likely to inspire a professional culture of honesty and are willing to share credit with others. One surprising finding is that leaders who have a preference for data-based decisions (higher MVPI Science) and those who have preference for intuitive-based decision (higher MVPI Aesthetics) are also perceived as displaying less integrity and accountability. This may suggest that these leaders may be willing to make decisions that seem unfair to others as long as there is data or intuition supporting the decision.

We also recognize a number of limitations with the current research. For example, although we argue that integrity and accountability are key components of ethical behavior, ethical behavior is a broader construct that may also include other aspects of performance. Similarly, although we used an organizing taxonomy to identify similar performance rating items relating to our criteria of interest, one possible reason for a lack of variance accounted for in many of our metaanalyses may have been that performance items were related but still different. Future research should examine both a broader range of behaviors representing ethical leadership and, when possible, use consistent performance rating items across samples to assess these behaviors.

Another limitation is that our criteria were based on supervisor ratings of competency performance for integrity and accountability. Research from Kaiser and Hogan (2010) suggests that competency ratings may not be the best way to identify leaders with integrity issues. In fact, integrity ratings were always more favorable than other competency dimensions and were generally less highly related with other performance ratings. Although they focused on subordinate ratings of competencies, this may suggest alternative methods for collecting measures of integrity and accountability may be critical for finding stronger relationships between personality and ethical behaviors. They suggest using ratings of expectations about the likelihood of unethical behavior as a more useful alternative.

Also, our findings are limited to the three predictor instruments we used in our study: the HPI, HDS, and MVPI. Although these instruments include a number of scales, thereby allowing us to examine a wide range of potential predictors, results may not generalize to other samples using different FFM, derailer, or values instruments. We would note, however, that some have argued it is more appropriate to use the same predictor measures in meta-analyses, particularly with personality, because not all personality instruments measure the exact same constructs (Hogan & Holland, 2003). But regardless, future research should attempt to replicate our findings using different predictor instruments that capture both similar and potentially yet-to-be-explored constructs.

Finally, although one advantage of our study was the availability of a large number of samples representing a wide range of industries and organizations, we did not have enough samples or information about samples to allow us to fully explore potential organizational-level moderators that could explain varying results across samples for a number of predictors. It is likely that characteristics relating to specific industries or organizations may influence these relationships. We encourage researchers to explore potential moderators when appropriate data are available.

Despite these limitations, our findings have significant implications for organizations seeking to identify top talent that will behave ethically. Organizations seeking to promote ethical behaviors, reduce deviant behavior or CWBs, or generally establish a climate conducive to ethical behavior, should start by identifying leaders who are resilient, conscientious, rule following, professional, less attention seeking, and less cynical.

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