

Prosocial Citizens Without a Moral Compass? Examining the Relationship Between Machiavellianism and Unethical Pro-Organizational Behavior

Christopher M. Castille¹ · John E. Buckner V² · Christian N. Thoroughgood¹

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Abstract Research in the organizational sciences has tended to portray prosocial behavior as an unqualified positive outcome that should be encouraged in organizations. However, only recently, have researchers begun to acknowledge prosocial behaviors that help maintain an organization's positive image in ways that violate ethical norms (e.g., misrepresenting or exaggerating the truth, concealing damaging information about the firm). Recent scandals, including Volkswagen's emissions scandal and Penn State's child sex abuse scandal, point to the need for research on the individual factors and situational conditions that shape the emergence of these unethical proorganizational behaviors (UPB). Drawing on trait activation theory, we argue that the "dark" trait of Machiavellianism should make individuals more willing to engage in UPB. Further, we argue that this willingness will be augmented when Machiavellians hold bottomline-mentality climate perceptions (BLMCPs), or the perception that ethical standards matter less than organizational performance. Using data from 170 U.S.

employees, results suggested that Machiavellians are more willing to engage in UPB, but that BLMCPs may not affect their motivation to engage in UPB. We discuss the study's theoretical and practical implications, as well as avenues for research.

Keywords Machiavellianism · Unethical proorganizational behavior · Counterproductive work behavior

Recent high-profile events in the public sphere have highlighted the need for a greater understanding of unethical pro-organizational behaviors (UPB), or acts intended to benefit the organization but which violate ethical standards (Umphress et al. 2010). For instance, in the recent case involving Volkswagen, employees intentionally developed software that could differentiate between typical driving conditions and laboratory testing conditions, adjusting engine performance and the corresponding emissions output accordingly. This device allowed dieselburning vehicles to perform within the Environmental Protection Agency's (EPA) emissions standards when performing under laboratory conditions. However, when performing under typical driving conditions, the device allowed the engine to perform as designed, generating between five and thirty-five times the level of toxins deemed acceptable by the EPA (Thompson et al. 2014). Other public incidents, such as the Penn State and Catholic Church's child sex abuse scandals, also contain examples of actions meant to benefit their organizations, but which violated ethical standards of conduct. Although these cases are dramatic and rare, research on UPB suggests that the willingness to engage in these behaviors is widespread and thus deserving of attention from researchers and practitioners alike.

Christopher M. Castille christopher.castille@villanova.edu

John E. Buckner V john.buckner.v@gmail.com

[☐] Christian N. Thoroughgood Christian.thoroughgood@gmail.com

Department of Psychology, Graduate Programs in Human Resource Development, Villanova University, 800 E. Lancaster Avenue, Suite 119, St. Mary's Hall, Villanova, PA 19085, USA

² Livonia, MI, USA

Unfortunately, the behavioral ethics literature has largely focused on unethical acts that threaten the interests of larger collectives, as well as individuals' behavioral intentions to engage in such acts (Kish-Gephart et al. 2010). Recent research on UPB offers a more nuanced perspective on unethical behavior in organizations by highlighting the reality that many behaviors, although clearly in violation of ethical codes and guidelines, may nonetheless align with and contribute to an organization's interests (e.g., Effelsberg et al. 2014; Graham et al. 2015; Miao et al. 2013; Umphress et al. 2010). Indeed, as our earlier examples highlight, organizational members may engage in a wide array of unethical behaviors, such as deceiving by way of commission or omission, which benefit or are intended to benefit their organization's interests (Umphress and Bingham 2011). Thus, greater insight into the individual factors and situational conditions that shape the emergence of UPB is needed in order to better explain ethically questionable events and behavior in organizations, as well as to inform organizational policies and practices geared toward preventing such behavior from occurring.

In this study, we take a person-situation interactionist approach to UPB, conceptualizing UPB as a function of person and situational variables acting jointly to shape behavior (Hattrup and Jackson 1996). Drawing on trait activation theory (Tett and Burnett 2003), we argue that the "dark" trait of Machiavellianism may render certain individuals more susceptible to engaging in UPB. By examining the potential relationship between Machiavellianism and UPB, the present study answers calls to expand the nomological network of UPB (e.g., Miao et al. 2013). In so doing, we move beyond the current dominant focus on attitudinal predictors of UPB and draw greater attention to dispositional factors that are likely potent predictors of such behavior (see Kish-Gephart et al. 2010; O'Boyle et al. 2012). Furthermore, consistent with trait activation theory's core tenet that situations vary in the degree to which they motivate the expression of traitrelevant behavior (Tett and Guterman 2000), we examine how perceptions of bottom line-oriented behavior in the work context may augment Machiavellian employees' willingness to engage in UPB. By examining the potential moderating role of these climate perceptions, we answer recent calls to examine more complex configurations of individual and situational factors that drive unethical behavior in organizations (see Kish-Gephart et al. 2010).

We also add greater nuance to the extant literature on personality and organizational behavior, which often defines "dark" traits and "bright" outcomes, including Machiavellianism and contextual performance, respectively, by whether or not they are perceived to be wholly "good" or "bad" with respect to the collective interests of organizations and their members. More specifically, we explain how Machiavellians' selfishness may actually enhance their willingness to engage in behaviors that, although unethical, are meant to serve the organization. As such, we contribute to a growing body of research suggesting that unethical intentions or behavior may, at times, be pro-organizational in nature (Belschak et al. 2015; Effelsberg et al. 2014; Miao et al. 2013; Umphress and Bingham 2011; Umphress et al. 2010).

Theoretical Overview

Researchers have largely focused on identifying situational predictors, such as leadership (e.g., Effelsberg et al. 2014; Miao et al. 2013), and attitudinal antecedents, including affective commitment and organizational identification (e.g., Matherne and Litchfield 2012; Umphress et al. 2010), of UPB. Although such research is informative, it overlooks the potential impact of dispositional variables. Incorporating individual difference factors, in addition to situational and attitudinal antecedents of UPB, is important given that they can generate models that provide more accurate predictions (Antonakis et al. 2010; Ilies et al. 2006). Drawing on trait activation theory (Tett and Burnett 2003), we examine Machiavellianism as a potential dispositional antecedent of UPB, as well as the moderating potential of bottom-line mentality climate perceptions in rendering Machiavellians more likely to engage in UPB. First, we define Machiavellianism and explain why Machiavellians may be inclined to engage in UPB. Second, we explain the trait activation potential of bottom-line mentality climate perceptions.

Machiavellianism

The term Machiavellianism derives from Niccolo Machiavelli, a 16th century Florentine writer, historian, politician, and theoretician, who authored *The Prince*, a theoretical discourse on accumulating and exercising political power and influence in organizations. In his famous book, Machiavelli noted the importance of pragmatism, emotional distance, and manipulative influence tactics in navigating complex organizational systems. Nearly 500 years later, Machiavelli's book became the foundation for scholarly research on the concept of Machiavellianism (Christie and Geis 1970), a personality profile defined by four enduring attributes: (1) the willingness to disregard ethical standards in service of self-oriented outcomes (*amoral manipulation*), (2) a cynical outlook on the motives and intentions of others (*distrust of*



others), (3) a need to dominate interpersonal situations and minimize the power of others (desire for control), and (4) a strong desire to acquire extrinsic indicators of career success (desire for status) (see Dahling et al. 2009; Wu and Lebreton 2011). As such, according to Dahling et al. (2009), Machiavellianism reflects a higher-order latent construct. We adopt this model of Machiavellianism given its better psychometric qualities relative to other existing Machiavellianism measures (Miller et al. 2015)¹.

Given these tendencies, it is generally accepted that Machiavellians will inevitably pursue their own selfish interests at the expense of others and the organizations in which they reside (see Dahling et al. 2009). Trait activation theory (Tett and Burnett 2003) suggests that there is a direct link between personality traits and trait-relevant intentions. Indeed, prior research suggests that Machiavellians engage in more economic opportunism (Sakalaki et al. 2007) and theft (Fehr et al. 1992; Harrell and Hartnagel 1976), select politically charged careers with greater opportunities to accrue wealth, power, and status (Hunt and Chonko 1984), and are less likely to conform to organizational norms and rules (Thoroughgood et al. 2012). Machiavellianism has also been implicated in high-profile scandals, such as those at Enron and MCI Worldcom (Dahling et al. 2009). This suggests Machiavellians hold strong intentions to engage in opportunistic behavior intended to benefit their own self-serving goals.

Some writers, however, have noted that Machiavelli's view on power and influence in The Prince is far less malicious than commonly described. For instance, Gustafson (2000) noted that true Machiavellians are able to obtain necessary resources from others without incurring disfavor, suggesting that they can positively contribute to collective goals. Similarly, Judge et al. (2009) noted that Machiavellians are highly motivated to lead, are strategic in their thinking style, and are adept at utilizing their political skill to navigate complex power dynamics in organizations. Thus, they may use their abilities as leaders and politicians to act in the interest of others if they see a clear strategic benefit to themselves for doing so. Supporting this contention, Belschak et al. (2015) found that transformational leaders were able to channel Machiavellians' selfishness by granting them greater autonomy, in turn motivating them to engage in more challenge-oriented citizenship behavior. In sum, while Machiavellians often engage in unethical acts that may serve to undermine the collective interests of their groups, they can also act in ways that further collective goals—so long as they stand to benefit from such acts.

UPB and the Dark Side of Contextual Performance

Contextual performance refers to discretionary, or out-role, behaviors that maintain and contribute to organizational interests (Motowildo et al. 1997). It involves various intentions and behaviors that are typically positive, such as helping coworkers, following rules at inconvenient times, supporting the organization's goals, persisting beyond expectations, and volunteering time. We argue that UPB reflects a form of contextual performance called "civic virtue," which refers to behaviors intended to help promote the success of the organization or support the company's image (Podsakoff et al. 1997). Many acts of UPB can help foster the success of an organization or sustain its positive image in ways that are unethical. For example, concealing information regarding the harmful effects of an organization's product on consumers and/or the environment, misrepresenting or exaggerating the truth about a firm's financial performance, and withholding damaging information about leaders' ethical misconduct may all preserve an organization's image in the public eye. Although unethical, such actions may nonetheless serve to maintain or enhance a firm's competitive edge, retain valued customers and resources, and ultimately help the organization to compete more effectively in the marketplace. Based on this understanding, we would argue that existing frameworks should be extended in order to incorporate other forms of contextual performance, regardless of their unethical nature.

Machiavellianism and UPB

There has been an increasing interest in Machiavellianism's potential role in shaping employees' contextual performance. Because Machiavellians tend to ignore positive reciprocity norms (Gunnthorsdottir et al. 2002), are interpersonally cold (Wiggins and Broughton 1985), and lack empathy (Paal and Bereczkei 2007), researchers have argued that they are less likely to help others or the organization (Moore et al. 2012; Zagenczyk et al. 2014). Indeed, prior research on student samples suggests that Machiavellians are unlikely to engage in prosocial behaviors, such as sharing notes (McHoskey 1999). Additionally, and perhaps not surprisingly due to its "ends justify the means" value orientation, Machiavellianism predicts unethical behavior (see Kish-Gephart et al. 2010 for a meta-analysis). More recently, it has also been found to be positively associated with counterproductive work behavior (see O'Boyle et al. 2012 for a meta-analysis),



¹ Following Miller et al. (2015), who suggested that Dahling et al.'s (2009) measure of Machiavellianism results in multivariate non-normal data, we tested for normality of our item-level data. Results suggested the data were non-normal. Thus, we used maximum likelihood estimation with robust standard errors and Sattora-Bentler scaled Chi-squares $(S - B\chi^2)$ for model comparison purposes (Jöreskog and Sörbom 2006).

suggesting that Machiavellians are unwilling to engage in valued forms of contextual performance at work.

However, we argue that the general view that Machiavellians are unwilling to engage in contextual performance is overly simplistic. Indeed, Machiavellians' utilitarian sense of morality (i.e., ends justify the means) should dispose them toward doing whatever it takes, even engaging in prosocial activities, to satisfy their own selfserving goals. Thus, when their interests align with those of the organization, as they would when damaging information threatens the status, reputation, or even survival of the company, Machiavellians should respond by doing what is economically rational and in their own self-interests (Gustafson 2000). In many cases, this may involve unethical behaviors meant to protect and shield the organization from external scrutiny, which, in turn, may promote their chances of benefitting economically and professionally from their employer. In other words, Machiavellians may believe that "doing the dirty work" and engaging in unethical acts in order to protect the firm's image represent opportunities to benefit personally. This notion that Machiavellians are rational goal-oriented actors is consistent with research suggesting that, due to their focus on profitable economic exchanges, Machiavellians tend to form transactional psychological contracts with their organizations that are economic in nature (Zagenczyk et al. 2014) and which predispose them towards engaging in economically opportunistic behavior (Sakalaki et al. 2007). In trait activation terms (Tett and Burnett 2003), Machiavellianism should directly correspond to a strong willingness to engage in UPB. As such, we expect that Machiavellianism will be positively related to the willingness to engage in UPB.

Hypothesis 1 Machiavellianism will be positively correlated with the willingness to engage in UPB.

The Moderating Role of Bottom-Line Mentality Climate Perceptions

Prior research has called for a person-situation interaction approach to the study of unethical intentions and behavior in organizations (see Kish-Gephart et al. 2010). Consistent with this approach, trait activation theory proposes that psychological climate perceptions can augment the relationships between personality traits and related work motivations, ethical or otherwise (Tett and Burnett 2003). For instance, a study by Day and Bedeian (1991) found that climates viewed as warm and supportive motivated the performance of work-oriented individuals by providing cues that employees' work-related efforts were valued and supported. Similarly, there may be climate factors that foster unethical pro-organizational behavior by providing

cues that signal that such acts are accepted and rewarded. motivating individuals disposed to unethical behavior to engage in such behavior (Miao et al. 2013; Vidaver-Cohen 1998). To this point, we suggest that bottom-line mentality climate perceptions (BLMCPs), in particular, may increase Machiavellians' willingness to engage in UPB by communicating that ethics can be disregarded in the pursuit of organizational goals. As noted earlier, Machiavellians should be quite willing to do this. We focus on BLMCPs, rather than objective or shared perceptions of climate, given prior research that suggests individual climate perceptions, rather than collective perceptions, motivate Machiavellians to engage in unethical behavior (Kuyumcu and Grandey 2013). Drawing on the literature on bottomline mentality (Greenbaum et al. 2012), we define BLMCPs as an employee's perception that coworkers pursue organizational goals and interests at the expense of competing priorities, such as those specified by ethical guidelines and standards of conduct.

Greenbaum et al. (2012) argued that an employee's bottom-line mentality, or one-dimensional thinking that revolves around securing bottom-line outcomes to the neglect of competing priorities, can be acquired through social learning processes and can cause employees to perceive their interactions in terms of wins and losses, thereby contributing to competitive work environments. Indeed, Greenbaum et al. (2012) found that supervisors' and subordinates' bottom-line mentalities were positively related to subordinate social undermining behaviors. Expanding on Greenbaum et al.'s (2012) logic, if bottomline mentalities are acquired via social learning, then BLMCPs may develop in certain work environments as employees interact with their superiors and with one another. Bottom-line mentality climates are similar to Ostroff's (1993) concept of achievement-oriented climates, but focus on the pursuit of organizational goals to the neglect of competing priorities, such as ethical codes of conduct. As O'Reilly et al. (1991) noted, firms that are outcome oriented demand that results be achieved and convey the message that other priorities (e.g., ethics) are less important. Yet, simply because these climates support unethical behavior does not mean that all individuals will be willing to engage in unethical acts.

Taking this analysis further and drawing on trait activation theory (Tett and Burnett 2003), climate perceptions should play a key role in shaping the expression of personality traits by increasing individuals' willingness to act in trait-relevant ways. Situations are trait-relevant if they provide cues that prompt a person to behave in trait-relevant ways (Tett and Burnett 2003), and research suggests that trait-relevant situations can strengthen the relationship between traits and trait-relevant behavioral intentions (Tett and Guterman 2000). As our previous discussion alludes,



BLMCPs may foster the expression of Machiavellianism by increasing Machiavellians' willingness to disregard ethics in pursuit of the status and control they desire. That is, bottom-line mentality climates are situations that may motivate Machiavellians employees' willingness to engage in UPB. In terms of the present study, this suggests that when BLMCPs are high (vs. low), Machiavellians' willingness to engage in UPB may be augmented. Conversely, when BLMCPs are low (vs. high), Machiavellians' willingness to engage in UPB may be attenuated.

Hypothesis 2 Machiavellianism and BLMCPs will interact, such that the positive relationship between Machiavellianism and the willingness to engage in UPB will be stronger when BLMCPs are high rather than low.

Method

Participants included 170 full-time employees recruited through Amazon's Mechanical Turk (MTurk), which represents a viable population for researchers to collect survey data on organizational phenomena (e.g., Behrend et al. 2011; Carter et al. 2013). MTurk is a crowdsourcing internet marketplace that provides access to members of the general population who are willing to perform tasks (e.g., surveys) for a fee. Participants visit the MTurk website, view available task details (e.g., description, time investment, payment), and complete tasks of interest to them. MTurk allows researchers to gather diverse samples of individuals (Behrend et al. 2011), which is important to making more generalizable claims (Lakes 2013), address omitted variables, improve confidence regarding the nature of causal relationships, and address various issues related to participant bias (Aguinis and Lawal 2012; Landers and Behrend 2015). This last point is particularly important for the study of Machiavellianism and UPB, which may be viewed unfavorably by organizational decision makers who may hold reservations about having such research conducted within their organization (Spector and Rodopman 2010).

Participants reported an average organizational tenure of 4.24 years and 18.2 % self-identified as being in a management position. Sample job types included education (14.0 %), sales (13.5 %), administrative support (11.8 %), and management (5.3 %). Participants' average age was 32.39 years; 80.6 % reported at least some college education; 78.8 % self-identified as Caucasian; and 54.7 % identified as male. All regions of the U.S. were represented in the study.

Procedural and Data Quality Controls

Individuals were paid \$1.44 in total to participate in the study, which was determined as the national minimum

wage for the duration of the survey. While some may argue that minimum wage may lead to quality control issues, research has shown that quality of work remains largely unaffected by pay (see Mason and Suri 2012). Still, to ensure data quality, a prescreen survey was used to establish the sample pool for the focal study (Mason and Suri 2012). The prescreen survey contained questions regarding demographics, employment status, and three personality synonyms (e.g., brave, courageous) and antonyms (e.g., talkative, silent) (Goldberg and Kilkowski 1985), which were used to screen survey responses for inattentive responding (Meade and Craig 2012).

Of the 783 individuals completing the prescreen survey, 540 (68.97 %) indicated either full- or part-time employment status and were not flagged for inconsistent responding. These 540 participants were sent an email invitation to participate in two surveys, administered at the same point in time. Of those eligible, 172 completed both surveys (31.85 % response rate). Two more cases were removed for inattentive responses to a filter item (i.e., "For this item, please mark 'strongly disagree'") (Meade and Craig 2012), resulting in a final sample size of 170. The surveys were separated in order to create a proximal separation between the study's predictor measure (Machiavellianism) and the moderator and outcome scales (BLMCP and UPB) (see Podsakoff et al. 2003). Further, we used a cover story suggesting different research teams constructed each survey in order to disguise the study's purpose. Podsakoff and his colleagues (2003) recommended these procedures as a way of reducing the influence of measurement context effects, a proposed source of common method variance (CMV). Moreover, items and scales were presented randomly to reduce any item context effects (Peterson 2000; Podsakoff et al. 2003), another proposed source of CMV. Participants were assured anonymity to reduce evaluation apprehension (Fowler 1993; Podsakoff et al. 2003), as this has been shown to result in more accurate reports on sensitive topics (Ong and Weiss 2000). Still, this may not eliminate possible impression management bias. Thus, we tested for this potential source of method bias.

Measures

Machiavellianism

We used Dahling et al.'s (2009) 16-item scale to assess the construct of Machiavellianism ($\alpha = .89$). This multi-dimensional measure comprises four dimensions, including amoral manipulation ($\alpha = .86$), distrust of others ($\alpha = .84$), desire for control ($\alpha = .81$), and desire for status ($\alpha = .84$). Sample items include: "I am willing to be unethical if I believe it will help me succeed" and "I dislike committing to groups because I don't trust others."



Bottom-Line Mentality Climate Perceptions (BLMCPs)

In order to measure BLMCP ($\alpha=.93$), the four-item BLM individual difference scale developed by Greenbaum et al. (2012) was reworded to reflect a collective rather than personal referent (i.e., using "people here" rather than "I" in the items). Sample items from this revised scale include: "People here are solely concerned with meeting the bottom line" and "People here treat the bottom line as more important than anything else." We emphasize that scores on this scale reflect perceptions of one's coworkers as being motivated by the pursuit of organizational outcomes to the neglect of competing priorities. As such, scores on this measure do not reflect collective perceptions or aggregate phenomena.

Willingness to Engage in Unethical Pro-organizational Behavior (UPB)

This measure was used verbatim from Umphress et al.'s (2010) six-item scale ($\alpha=.87$). Sample items include: "If it would help my organization, I would misrepresent the truth to make my organization look good," "If my organization needed me to, I would conceal information from the public that could be damaging to my organization," and "If it would help my organization, I would withhold negative information about my company or its products from customers and clients".

Control Variables

Impression management bias can occur when individuals respond to sensitive questions, such as those regarding their unethical behavior (Podsakoff et al. 2003). To control for this, study participants completed an 18-item version of Paulhus's (1991) balanced inventory of desirable responding (BIDR). Research suggests that Machiavellians are prone to utilize impression management (IM) tactics indiscriminately (Bolino and Turnley 2003). This suggests our measured method effect of IM may inappropriately label substantive variance as method variance. As such, prior to conducting our analyses, we removed items that had obvious content overlap with Machiavellianism. Sample items removed include: "I sometimes tell lies if I have to" and "I sometimes try to get even rather than forgive and forget." Six items from the BIDR were thus retained ($\alpha = .61$) and used to capture a potential IM method effect. Sample items in this scale include: "I never swear," "I always obey laws, even if I'm unlikely to get caught," and "I sometimes drive faster than the speed limit." To demonstrate that this scale still captured IM, we correlated this six-item scale with the original 18-item BIDR. The observed correlation was strong (r = .86, p < .001), suggesting that the reduced scale still captured IM. Extreme item responses were then counted toward an IM scale score (Paulhus 1984), which formed a parcel and was used to create a latent measured method effect. Research also indicates organizational tenure, age, and gender are related to unethical behavior (Ones and Dilchert 2013). Therefore, we also controlled for these variables when testing our hypotheses by allowing these controls to influence Machiavellianism's facets, BLMCP, and the willingness to engage in UPB.

Analytical Approach

To provide confidence in our measures, we conducted a series of confirmatory factor analyses (CFAs) using maximum likelihood estimation in Mplus 7.1. We used CFA to examine covariances at the item level, allowing us to more appropriately examine the factor structure of these constructs. We also used SEM because all latent construct correlations can be examined simultaneously. CFA also allowed us to test for the presence of common method variance and common method bias attributable to IM (Williams et al. 2010). The CFA marker technique for detecting method variance has been shown to yield parameter estimates close to their true score values in various settings (Williams and O'Boyle 2015). When using this technique, an initial CFA is conducted to identify the factor and residual loadings for the IM indicators. These values, which define the meaning of the measured IM method effect, are fixed in all subsequent models. Further, given method effect variables are assumed to be uncorrelated with substantive variables (Lindell and Whitney 2001), all latent construct correlations with this IM method factor were constrained to zero. This allowed the measured IM method construct to remain constant across all tests for different types of method variance (Williams et al. 2010).

The tests for different types of method variance include modeling (1) the absence of method effects (baseline) and modeling method effects as affecting all responses (2) equally (noncongeneric) or (3) to varying degrees (congeneric). The models are then contrasted via a series of statistical comparisons (Williams et al. 2010). If method variance due to IM is detected, a follow-up model is tested in which the substantive construct correlations are fixed to values from the baseline model. A significant Chi-square comparison of this latter model to a model containing only method effects implies that IM has biased these latent construct correlations.

Following the tests for IM method effects, we tested our hypothesized model using structural equation modeling (SEM). We first tested a model that included the higherorder Machiavellianism construct, the control variables, and the hypothesized linear effect linking Machiavellianism to



UPB. We then tested a model in which a latent Machiavellianism by BLMCP interaction effect was entered. We used Mplus (Muthén and Muthén 2007) to create a latent variable interaction and tested whether the inclusion of this interaction improved fit, which is an approach that has been used to test latent variable interactions (e.g., Graves et al. 2013). To assess the fit of our linear model, we used the Chisquare statistic, root mean square residual (RMSEA), and the comparative fit index (CFI) (Bentler 1990). In order to compare the model with the interaction effect, we compared the log-likelihood ratios, which are Chi-square distributed and therefore permit testing for significance with a Chisquare difference test.

Results

CFA and Method Effects Testing

Descriptive statistics are provided in Table 1. Table 2 provides the results of our CFA, tests for method variance, and test of method bias due to IM. The initial measurement model CFA indicated acceptable fit $[S - B\chi^2_{(305)} = 442.75,$ CFI = .94, RMSEA = .05 (95 % CI .04, .06)] and so different method effect models were compared (see Table 2). A significant difference between the baseline model and a method effect model would suggest method effects attributable to IM are present, which would require a subsequent test of method bias attributable to IM. Results a model comparison between baseline $[S-B\chi^2_{(311)} = 448.02, CFI = .94, RMSEA = .05 (95 \% CI)$.04, .06)] and the congeneric CMV model ($S-B\chi^2_{(285)} = 413.75$,

CFI = .94, RMSEA = .05 (95 % CI .04, .06)] did not provide evidence of method effects due to IM ($\Delta S - B\chi^2_{(26)} = 34.87$, p = .115). Given the absence of IM method effects, we proceeded to test our hypotheses, omitting the IM indicators from our model while also including the other control variables.

Structural Model and Hypothesis Testing

We first tested a linear model linking Machiavellianism to UPB, while also modeling the effects of control variables on the latent Machiavellianism facets, BLMCP, and UPB. A higher-order latent Machiavellianism factor was also included. Results of this model $[S-B\chi^2_{(354)} = 561.94,$ CFI = .91, RMSEA = .059 (95 %CI .049, .068)] revealed that gender correlated with amoral manipulation $(\beta = -.28, p < .001)$, desire for status $(\beta = -.20,$ p < .05), and BLMCPs ($\beta = -.17$, p < .05), but not with UPB ($\beta = .09$, p = .24). These results suggest that males are more willing to engage in amoral manipulation, possess a greater desire for status, and are more likely to construe their coworkers as motivated by bottom-line mentalities. Furthermore, tenure correlated with desire for control $(\beta = -.20, p < .05)$ and BLMCPs $(\beta = -.17, p < .05)$, suggesting that those with less tenure were more likely to desire control and hold BLMCPs. Despite these effects, the linear relationship between Machiavellianism and UPB was significant ($\beta = .50$, p < .001), thus supporting Hypothesis 1. Cumulatively, the controls and latent variables accounted for 27 % of the variance in UPB. We then introduced a latent BLMCP by Machiavellianism interaction effect while still including the control variables. The results of this test failed to provide support for a latent

Table 1 Correlations, descriptive statistics, and reliabilities for study variables

	М	SD	1	2	3	4	5	6	7	8	9	10	11
1. Gender	1.45	.50											
2. Age	32.39	9.86	_										
3. Tenure	4.24	3.98	.01	.57**									
4. BIDR	3.07	.64	12	12	15	.61							
5. Machiavellianism	2.48	.65	18*	22**	25**	.49**	.89						
6. Amoral manipulation	1.93	.81	27**	22	20	.49**	.82**	.86					
7. Desire for control	2.82	.89	05	13	18*	.26**	.64**	.36**	.81				
8. Desire for status	2.94	1.03	18*	20**	21**	.37**	.70**	.41**	.48**	.84			
9. Distrust of others	2.82	.85	01	11	15	.30**	.77**	.53**	.26**	.29**	.84		
10. BLMCP	2.82	1.06	16*	.02	09	.21**	.51**	.40**	.26**	.23**	.53**	.93	
11. UPB (willingness)	2.71	1.11	10	08	09	.39**	.40**	.48**	.20**	.30**	.19*	.02	.88

Gender coded as '0' = male, '1' = female. Internal consistency (Cronbach's Alpha) bolded and placed on the diagonal *BIDR* balanced inventory of desirable responding, *BLMCP* bottom line mentality climate perceptions, *UPB* unethical pro-organizational behavior N = 170, *p < .05, **p < .01



Table 2 Model fit statistics testing for the presence of method variance due to impression management

Model	Sattora–Bentler χ^2	Scaling correction factor	df	CFI	RMSEA
1. CFA	442.75*	1.1064	305	.94	.05 [.04, .06]
2. Baseline (no IM effects)	448.02*	1.1037	311	.94	.05 [.04, .06]
3. Noncongeneric (equal IM effects)	446.34*	1.1027	310	.94	.05 [.04, .06]
4. Congeneric (variable IM effects)	413.75*	1.0828	285	.94	.05 [.04, .06]
χ^2 Model comparison tests		$\Delta \chi^2$	Δdf		p value
Baseline versus noncongeneric		1.77	1		.183
2. Baseline versus congeneric	3	34.87	26		

^{*} p < .05

interaction effect (b = -.07, ns), failing to support Hypothesis 2.

Discussion

A number of recent high-profile cases involving unethical pro-organizational behavior have highlighted the pervasiveness of UPB across organizations of various forms and purposes. For instance, in the case of Penn State's child sex abuse scandal, as Thoroughgood and Padilla (2013) point out, there were various individuals—from the renowned football coach, Joe Paterno, and other members of his program to Penn State's former president, Graham Spanier, and other senior officials—who, for various reasons (e.g., loyalty, fear, personal gain), knowingly covered up damaging information related to Jerry Sandusky's sexual abuse of at least ten young boys from 1994 to 2009. Moreover, certain environmental conditions, including the characteristics of a tightly-knit coaching fraternity and the University's economic dependency on its football program, are likely to have shaped a willingness to protect Penn State and its football program from outside scrutiny (Thoroughgood and Padilla 2013). These events, along with a growing body of research, have called into question traditional views on unethical behavior in organizations, suggesting some forms of unethical activity may be intended to serve an organization's interests.

In responding to recent calls to examine the person and situational factors that shape the emergence of UPB (e.g., Miao et al. 2013), we examined the relation between Machiavellianism and the willingness to engage in UPB, as well as the trait activating potential of BLMCPs. Our results suggest those high on Machiavellianism tend to report a greater willingness to engage in unethical behaviors intended to promote their organizations' interests. However, contrary to our prediction based on trait activation theory, we did not find that BLMCPs augmented the

link between Machiavellianism and individuals' willingness to engage in UPB. Although caution should be taken in interpreting null findings, the lack of an interaction may be due to the strength of the relationship between Machiavellianism and the willingness to engage in UPB. Given our data suggest that Machiavellians are already quite willing to engage in UPB, there may be little room for their willingness to increase based on BLMCPs. In other words, Machiavellian employees may be willing to engage in high levels of UPB regardless of the social norms that define the organizational contexts in which they reside. However, because bottom-line mentality climates may still provide more opportunities to disregard ethics, the actual expression of UPB (which we did not measure) might increase for Machiavellians. Thus, trait activation may still be a viable hypothesis but may require measuring actual UPB, rather than the willingness to engage in UPB.

Although it is not reported above, we further examined the relationships between facets of Machiavellianism and UPB to determine which facets accounted for the most variance in UPB. While each facet was positively correlated with UPB (see Table 1), an SEM model in which all facets of Machiavellianism were modeled as causes of UPB $[S-B\chi^2_{(351)} = 556.60, \text{ CFI} = .91, \text{ RMSEA} = .06]$ (95 %CI .05, .07)] revealed that only amoral manipulation predicted a willingness to engage in UPB ($\beta = .54$, p < .001). This suggests the tendency to abandon ethical standards and value manipulative behavior shape Machiavellians' willingness to engage in UPB. Of all the Mach facets, amoral manipulation is most aligned with the argument that Machiavellians are rational opportunists. The other facets were not relevant to UPB when all facets were modeled simultaneously because amoral manipulation accounts for each facet's covariation with UPB. That is, the lack of a moral compass seems to render Machiavellians willing to engage in UPB.

Our findings add greater nuance to the literature by suggesting Machiavellians, who are generally believed to



act in ways contrary to organizational goals and interests, are willing to protect their organizations via unethical means given they may view these activities through a self-serving lens. Thus, our findings contribute to a growing discussion surrounding the potential unethical nature of various prosocial behaviors in organizations (Behrend et al. 2011; Umphress et al. 2010; Miao et al. 2013). Further, we contribute to an even broader discourse surrounding the potential "bright" sides of "dark" personality traits, which have typically been conceptualized as wholly detrimental in organizations (Judge et al. 2009; Resick et al. 2009).

Theoretical Implications

UPB researchers have tended to focus on the integration of social identity and social exchange theories to frame their work (Effelsberg et al. 2014; Matherne and Litchfield 2012; Umphress and Bingham 2011; Umphress et al. 2010). Prior studies have demonstrated that strong identification with one's organization or supervisor along with strong exchange relationships can explain the occurrence of UPB. Using trait activation theory, we called attention to dispositional predictors of UPB and, by examining BLMCPs, provide interesting avenues for future research. Specifically, there seems to be fertile theoretical ground for considering how personality theory might complement the use of social identity and social exchange theories in the study of UPB.

The present study also sheds light on the potential nuances inherent to conceptualizations of Machiavellianism and contextual performance. From a historical standpoint, researchers have tended to classify the former as inherently "dark" and the latter as "bright" (e.g., Hogan et al. 1996; Judge and LePine 2007; Judge et al. 2009). Thus, traits and behaviors regarded on the surface as consistent with organizational goals tend to be classified as wholly "positive" (e.g., conscientiousness and contextual performance), while those generally regarded as contrary to organizational goals tend to be categorized as wholly "negative" (e.g., Machiavellianism and CWB). However, our results suggest Machiavellians are willing to protect their organization's interests, albeit in unethical ways. Our findings suggest researchers should continue to pursue a more nuanced understanding of "bright" and "dark" traits and behaviors in organizational life.

Practical Implications

Given our finding that Machiavellianism, and specifically amoral manipulation, inclines individuals toward UPB, screening job applicants based on this trait (or facet) is one potential way of reducing the occurrence of UPB (MacLane and Walmsley 2010). However, practitioners

may be cautious about this recommendation as the relevant assessments may be seen as violating the Americans with Disabilities Act (ADA). Nonetheless, researchers have argued that screening for "dark" traits, such as Machiavellianism, is unlikely to violate the ADA because individuals possessing these traits are capable of leading relatively normal lives and because the screening assessments were developed for use with normal rather than clinical populations (Guenole 2014; Wu and Lebreton 2011). As such, practitioners might consider amoral manipulation assessments in high-risk employee selection contexts as a mechanism for reducing the likelihood of UPB.

Additionally, a more nuanced approach might be to focus on training leaders to proactively identify Machiavellian employees in order to manage them more effectively. Indeed, research suggests that there are several signature characteristics of Machiavellians that managers may look for, including a coldness or lack of empathy in interpersonal dealings (Paal and Bereczkei 2007; Wiggins and Broughton 1985), the indiscriminate use of impression management tactics (Bolino and Turnley 2003; Jonason et al. 2012), and, more importantly for curbing UPB, a distinct willingness to disregard ethical standards in the service of self-interest (Dahling et al. 2009). Training managers to identify these characteristics may help them to reliably identify individuals prone toward UPB. Of course, once identified, leaders will need the appropriate skills for effectively managing these employees. As noted earlier, training leaders in transformational and ethical leader behaviors have shown promise in this regard. For instance, Machiavellians led by transformational leaders have been shown to report greater job autonomy and accompanying intrinsic motivation, causing them to engage in greater citizenship behavior (e.g., challenging problematic organizational processes) (Belschak et al. 2015). Recognizing that transformational leaders may paradoxically and simultaneously promote UPB by increasing their subordinates' organizational identification (Effelsberg et al. 2014), leadership training programs should also contain a strong ethical component to avoid these unintended consequences.

Study Strengths and Limitations

With respect to strengths, the present study incorporated a number of safeguards in order to ensure the quality of the sample and to reduce any method effects. First, we used a prescreen survey to establish the quality of our sample pool and to minimize the influence of inattentive responding (Mason and Suri 2012). Second, consistent with the recommendations of Podsakoff et al. (2003), to reduce the impact of measurement context effects, we separated surveys containing our predictor measure and our moderator



and outcome measures and used a bogus cover story to disguise the purpose of the study. Third, to further reduce any context effects, we presented items and scales in random order (Peterson 2000; Podsakoff et al. 2003) and assured anonymity to minimize any evaluation apprehension when responding to the study's sensitive items (Fowler 1993; Podsakoff et al. 2003). Fourth, we assessed for potential method bias due to impression management, as well as effects due to respondent age, gender, and organizational tenure. Finally, our sample comprised individuals from various industries, increasing its external validity.

Nevertheless, our cross-sectional design prohibits making any causal claims. Thus, future research should employ longitudinal designs, which may assist in teasing out the causal role of both personal and situational factors in shaping the willingness to engage in UPB (e.g., Wille and De Fruyt 2014). Also, we did not assess actual UPB, but rather a willingness to engage in UPB. However, intentions do appear to translate into actual unethical behavior (Kish-Gephart et al. 2010). Nonetheless, future research should consider capturing actual occurrences of UPB using multisource designs (Kammeyer-Mueller et al. 2010). Lastly, because our study drew upon a convenience sample of U.S. employees, the extent to which our results generalize to the broader U.S. population (and to other cultures) may be questioned. Yet, this limitation also applies to most published studies that utilize samples from specific organizations (Johns 2006).

Conclusion

In sum, although the behavioral ethics and OB literatures have tended to promote overly simplistic categorizations of specific personality traits (e.g., Machiavellianism) and behaviors (e.g., contextual performance) as "good" or "bad," there is growing appreciation for the nuances surrounding many of the traits and behaviors we study as organizational researchers. The present study further contributes to an emerging discourse on the ethical ambiguities surrounding many prosocial acts intended to protect and promote the interests of organizations and their members.

References

- Aguinis, H., & Lawal, S. O. (2012). Conducting field experiments using eLancing's natural environment. *Journal of Business Venturing*, 27(4), 493–505. doi:10.1016/j.jbusvent.2012.01.002.
- Antonakis, J., Bendahan, S., Jacquart, P., & Lalive, R. (2010). On making causal claims: A review and recommendations. *The Leadership Quarterly*, 21(6), 1086–1120.

- Behrend, T., Sharek, D., Meade, A., & Wiebe, E. (2011). The viability of crowdsourcing for survey research. *Behavior Research Methods*, 43(3), 800–813. doi:10.3758/s13428-011-0081-0.
- Belschak, F. D., Den Hartog, D. N., & Kalshoven, K. (2015). Leading Machiavellians. *Journal of Management*, 41(7), 1934–1956. doi:10.1177/0149206313484513.
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107(2), 238–246.
- Bolino, M. C., & Turnley, W. H. (2003). More than one way to make an impression: Exploring profiles of impression management. *Journal of Management*, 29(2), 141–160.
- Carter, N. T., Dalal, D. K., Boyce, A. S., O'Connell, M. S., Kung, M.-C., & Delgado, K. M. (2013). Uncovering curvilinear relationships between conscientiousness and job performance: How theoretically appropriate measurement makes an empirical difference. *Journal of Applied Psychology*,. doi:10.1037/a0034688.
- Christie, R., & Geis, F. L. (1970). Studies in Machiavellianism. New York: Academic Press.
- Dahling, J. J., Whitaker, B. G., & Levy, P. E. (2009). The development and validation of a new Machiavellianism scale. *Journal of Management*, 35(2), 219–257.
- Day, D. V., & Bedeian, A. G. (1991). Predicting job performance across organizations: The interaction of work orientation and psychological climate. *Journal of Management*, 17, 589–600.
- Effelsberg, D., Solga, M., & Gurt, J. (2014). Transformational leadership and follower's unethical behavior for the benefit of the company: A two-study investigation. *Journal of Business Ethics*, *120*(1), 81–93. doi:10.1007/s10551-013-1644-z.
- Fehr, B., Samson, D., & Paulhus, D. (1992). The construct of Machiavellianism: Twenty years later. In C. D. Spielberger & J. N. Butcher (Eds.), *Advances in personality assessment* (Vol. 9, pp. 77–116). Hillsdale, NJ: Erlbaum.
- Fowler, F. J, Jr. (1993). *Survey research methods* (2nd ed.). Thousand Oaks, CA: Sage Publications Inc.
- Goldberg, L., & Kilkowski, J. M. (1985). The prediction of semantic consistency in self-descriptions: Characteristics of persons and of terms that affect the consistency of responses to synonym and antonym pairs. *Journal of Personality and Social Psychology*, 48(1), 82–98.
- Graham, K., Ziegert, J., & Capitano, J. (2015). The effect of leadership style, framing, and promotion regulatory focus on unethical pro-organizational behavior. *Journal of Business Ethics*, *126*(3), 423–436. doi:10.1007/s10551-013-1952-3.
- Graves, L. M., Sarkis, J., & Zhu, Q. (2013). How transformational leadership and employee motivation combine to predict employee proenvironmental behaviors in China. *Journal of Environmental Psychology*, 35, 81–91.
- Greenbaum, R. L., Mawritz, M. B., & Eissa, G. (2012). Bottom-line mentality as an antecedent of social undermining and the moderating roles of core self-evaluations and conscientiousness. *Journal of Applied Psychology*, 97(2), 343–359. doi:10.1037/a0025217.
- Guenole, N. (2014). Maladaptive personality at work: Exploring the darkness. *Industrial and Organizational Psychology: Perspec*tives on Science and Practice, 7(1), 85–97. doi:10.1111/iops. 12114.
- Gunnthorsdottir, A., McCabe, K., & Smith, V. (2002). Using the Machiavellianism instrument to predict trustworthiness in a bargaining game. *Journal of Economic Psychology*, 23(1), 49–66.
- Gustafson, S. B. (2000). Personality and organizational destructiveness: Fact, fiction, and fable. In L. R. Bergman, R. B. Cairns, L. Nilsson, & N. Nystedt (Eds.), *Developmental science and the* holistic approach. Mahwah, NJ: Lawrence Earlbaum Associates.



- Hattrup, K., & Jackson, S. E. (1996). Learning about individual differences by taking situations seriously. In K. R. Murphy (Ed.), Individual differences and behavior in organizations (pp. 507–547). San Francisco: Josey-Bass.
- Harrell, W. A., & Hartnagel, T. (1976). Impact of Machiavellianism and the trustfulness of the victim on laboratory theft. *Sociometry*, 39, 157–165.
- Hogan, R., Hogan, J., & Roberts, B. W. (1996). Personality measurement and employment decisions—Questions and answers. American Psychologist, 51(5), 469–477.
- Hunt, S. D., & Chonko, L. B. (1984). Marketing and Machiavellianism. *Journal of Marketing*, 48(3), 30–42.
- Ilies, R., Arvey, R. D., & Bouchard, T. J. (2006). Darwinism, behavioral genetics, and organizational behavior: A review and agenda for future research. *Journal of Organizational Behavior*, 27(2), 121–141.
- Johns, G. (2006). The essential impact of context on organizational behavior. Academy of Management Review, 31(2), 386–408. doi:10.5465/AMR.2006.20208687.
- Jonason, P. K., Slomski, S., & Partyka, J. (2012). The Dark Triad at work: How toxic employees get their way. *Personality and Individual Differences*, 52(3), 449–453. doi:10.1016/j.paid.2011. 11.008.
- Jöreskog, K. G., & Sörbom, D. (2006). Windows LISREL 8.80. Lincolnwood, IL: Scientific Software International.
- Judge, T. A., & LePine, J. A. (2007). The bright and dark sides of personality: Implications for personnel selection in individual and team contexts. In J. Langan-Fox, C. Cooper, & R. Klimoski (Eds.), Research companion to the dysfunctional workplace: Management challenges and symptoms (pp. 332–355). Cheltenham: Edward Elgar Publishing.
- Judge, T. A., Piccolo, R. F., & Kosalka, T. (2009). The bright and dark sides of leader traits: A review and theoretical extension of the leader trait paradigm. *Leadership Quarterly*, 20(6), 855–875. doi:10.1016/j.leagua.2009.09.004.
- Kammeyer-Mueller, J., Steel, P. D. G., & Rubenstein, A. (2010). The other side of method bias: The perils of distinct source research designs. *Multivariate Behavioral Research*, 45(2), 294–321.
- Kish-Gephart, J. J., Harrison, D. A., & Treviño, L. K. (2010). Bad apples, bad cases, and bad barrels: Meta-analytic evidence about sources of unethical decisions at work. *Journal of Applied Psychology*, 95(1), 1–31. doi:10.1037/a0017103.
- Kuyumcu, D., & Grandey, A. (2013). Corrupt characters within cooperative climates: Can psychological safety buffer against sabotage behaviors by Machiavellian employees? (M.S.), Pennsylvania State University.
- Lakes, K. D. (2013). Restricted sample variance reduces generalizability. *Psychological Assessment*, 25(2), 643–650. doi:10.1037/a0030912.
- Landers, R. N., & Behrend, T. S. (2015). An inconvenient truth: Arbitrary distinctions between organizational, Mechanical Turk, and other convenience samples. *Industrial & Organizational Psychology*, 8(2), 142–164. doi:10.1017/iop.2015.13.
- Lindell, M. K., & Whitney, D. J. (2001). Accounting for common method variance in cross-sectional research designs. *Journal of Applied Psychology*, 86(1), 114–121.
- MacLane, C. N., & Walmsley, P. T. (2010). Reducing counterproductive work behavior through employee selection. *Human Resource Management Review*, 20(1), 62–72. doi:10.1016/j. hrmr.2009.05.001.
- Mason, W., & Suri, S. (2012). Conducting behavioral research on Amazon's Mechanical Turk. *Behavior Research Methods*, 44(1), 1–23. doi:10.3758/s13428-011-0124-6.
- Matherne, C. F, I. I. I., & Litchfield, S. R. (2012). Investigating the relationship between affective commitment and unethical pro-

- organizational behaviors: The role of moral identity. *Journal of Leadership, Accountability & Ethics*, 9(5), 35-46.
- McHoskey, J. W. (1999). Machiavellianism, intrinsic versus extrinsic goals, and social interest: A self-determination theory analysis. *Motivation and Emotion*, 23(4), 267–283.
- Meade, A. W., & Craig, S. B. (2012). Identifying careless responses in survey data. *Psychological Methods*, 17(3), 437–455.
- Miao, Q., Newman, A., Yu, J., & Xu, L. (2013). The relationship between ethical leadership and unethical pro-organizational behavior: Linear or curvilinear effects? *Journal of Business Ethics*, 116(3), 641–653. doi:10.1007/s10551-012-1504-2.
- Miller, B. K., Smart, D. L., & Rechner, P. L. (2015). Confirmatory factor analysis of the Machiavellian personality scale. In D. L. Smart & P. L. Rechner (Eds.), *Personality and individual* differences (Vol. 82, pp. 120–124). New York: Wiley.
- Moore, C., Detert, J. R., Treviño, L. K., Baker, V. L., & Mayer, D. M. (2012). Why employees do bad things: Moral disengagement and unethical organizational behavior. *Personnel Psychology*, 65(1), 1–48.
- Motowildo, S. J., Borman, W. C., & Schmit, M. J. (1997). A theory of individual differences in task and contextual performance. *Human Performance*, 10(2), 71–83.
- Muthén, L. K., & Muthén, B. O. (2007). *Mplus user's guide*. Los Angeles, CA: Muthén and Muthén.
- O'Boyle, E. H, Jr, Forsyth, D. R., Banks, G. C., & McDaniel, M. A. (2012). A meta-analysis of the dark triad and work behavior: A social exchange perspective. *Journal of Applied Psychology*, 97(3), 557–579. doi:10.1037/a0025679.
- Ones, D. S., & Dilchert, S. (2013). Counterproductive work behaviors: Concepts, measurement, and nomological network. In K. F. Geisinger, B. A. Bracken, J. F. Carlson, J.-I. C. Hansen, N. R. Kuncel, S. P. Reise, & M. C. Rodriguez (Eds.), APA handbook of testing and assessment in psychology: Test theory and testing and assessment in industrial and organizational psychology (Vol. 1, pp. 643–659). Washington, DC: American Psychological Association.
- Ong, A. D., & Weiss, D. J. (2000). The impact of anonymity on responses to sensitive questions. *Journal of Applied Social Psychology*, 30(8), 1691–1708.
- O'Reilly, C. A., Chatman, J., & Caldwell, D. F. (1991). People and organizational culture: A profile comparison approach to assessing person-organization fit. Academy of Management Journal, 34, 487–516.
- Ostroff, C. (1993). The effects of climate and personal influences on individual behavior and attitudes in organizations. *Organizational Behavior and Human Decision Processes*, 56, 56–90.
- Paal, T., & Bereczkei, T. (2007). Adult theory of mind, cooperation, Machiavellianism: The effect of mindreading on social relations. *Personality and Individual Differences*, 43, 541–551.
- Paulhus, D. L. (1984). Two-component models of socially desirable responding. *Journal of Personality and Social Psychology*, 46, 598–609.
- Paulhus, D. L. (1991). Measurement and control of response bias. In J. P. Robinson, P. R. Shaver, & L. S. Wrightsman (Eds.), *Measures of personality and social psychological attitudes* (pp. 17–59). San Diego, CA: Academic Press.
- Peterson, R. A. (2000). *Constructing effective questionnaires*. Thousand Oaks: Sage.
- Podsakoff, P. M., Ahearne, M., & MacKenzie, S. B. (1997). Organizational citizenship behavior and the quantity and quality of work group performance. *Journal of Applied Psychology*, 82(2), 262–270.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903.



- Resick, C. J., Weingarden, S. M., Whitman, D. S., & Hiller, N. J. (2009). The bright-side and the dark-side of CEO personality: Examining core self-evaluations, narcissism, transformational leadership, and strategic influence. *Journal of Applied Psychology*, 94(6), 1365–1381.
- Sakalaki, M., Richardson, C., & Thépaut, Y. (2007). Machiavellianism and economic opportunism. *Journal of Applied Social Psychology*, 37(6), 1181–1190. doi:10.1111/j.1559-1816.2007. 00208 x
- Spector, P. E., & Rodopman, O. B. (2010). Methodological issues in studying insidious workplace behavior. In J. Greenberg (Ed.), insidious workplace behavior (pp. 273–306). New York, NY: Routledge/Taylor & Francis Group.
- Tett, R. P., & Burnett, D. D. (2003). A personality trait-based interactionist model of job performance. *Journal of Applied Psychology*, 88(3), 500.
- Tett, R. P., & Guterman, H. A. (2000). Situation trait relevance, trait expression, and cross-situational consistency: Testing a principle of trait activation. *Journal of Research in Personality*, 34(4), 397–423. doi:10.1006/jrpe.2000.2292.
- Thompson, G. J., Carder, D. K., Besch, M. C., Thiruvengadam, A., & Kappanna, H. K. (2014). *In-use emissions testing of light-duty diesel vehicles in the United States*. Retrieved from the International Council on Clean Transportation website http://www.theicct.org/sites/default/files/publications/WVU_LDDV_in-use_ICCT_Report_Final_may2014.pdf.
- Thoroughgood, C. N., & Padilla, A. (2013). Destructive leadership and the Penn State scandal: A toxic triangle perspective. *Industrial and Organizational Psychology: Perspectives on Science and Practice*, 6(2), 144–149.
- Thoroughgood, C. N., Padilla, A., Hunter, S. T., & Tate, B. W. (2012). The susceptible circle: A taxonomy of followers associated with destructive leadership. *Leadership Quarterly*, 23(5), 897–917. doi:10.1016/j.leaqua.2012.05.007.
- Umphress, E. E., & Bingham, J. B. (2011). When employees do bad things for good reasons: Examining unethical pro-organizational

- behaviors. Organization Science, 22(3), 621–640. doi:10.1287/orsc.1100.0559.
- Umphress, E. E., Bingham, J. B., & Mitchell, M. S. (2010). Unethical behavior in the name of the company: the moderating effect of organizational identification and positive reciprocity beliefs on unethical pro-organizational behavior. *Journal of Applied Psychology*, 95(4), 769–780. doi:10.1037/a0019214.
- Vidaver-Cohen, D. (1998). Moral climate in business firms: A conceptual framework for analysis and change. *Journal of Business Ethics*, 17(11), 1211–1226.
- Wiggins, J. S., & Broughton, R. (1985). The interpersonal circle: A structural model for the integration of personality research. In R. Hogan & W. H. Jones (Eds.), *Perspectives in personality: A* research annual (Vol. 1, pp. 1–47). Greenwich, CT: JAI.
- Wille, B., & De Fruyt, F. (2014). Vocations as a source of identity: Reciprocal relations between Big Five personality traits and RIASEC characteristics over 15 years. *Journal of Applied Psychology*, 99(2), 262–281. doi:10.1037/a0034917.
- Williams, L. J., Hartman, N., & Cavazotte, F. (2010). Method variance and marker variables: A review and comprehensive CFA marker technique. *Organizational Research Methods*, 13(3), 477–514.
- Williams, L. J., & O'Boyle, E. (2015). Ideal, nonideal, and no marker variables: The CFA marker technique works when it matters. *Journal of Applied Psychology*, 100(5), 1579–1602.
- Wu, J., & Lebreton, J. M. (2011). Reconsidering the dispositional basis of counterproductive work behavior: The role of aberrant personality. *Personnel Psychology*, 64(3), 593–626. doi:10.1111/j.1744-6570.2011.01220.x.
- Zagenczyk, T. J., Restubog, S. L. D., Kiewitz, C., Kiazad, K., & Tang, R. L. (2014). Psychological contracts as a mediator between Machiavellianism and employee citizenship and deviant behaviors. *Journal of Management*, 40(4), 1098–1122. doi:10. 1177/0149206311415420.



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