Journal of Management Vol. 40 No. 4, May 2014 1098-1122 DOI: 10.1177/0149206311415420 © The Author(s) 2011 Reprints and permissions: sagepub.com/journalsPermissions.nav

# Psychological Contracts as a Mediator Between Machiavellianism and Employee Citizenship and Deviant Behaviors

Thomas J. Zagenczyk

Clemson University

Simon Lloyd D. Restubog

Australian National University

Christian Kiewitz

University of Dayton

Kohyar Kiazad

University of Melbourne

Robert L. Tang

De La Salle-College of Saint Benilde

Results from four studies in multiple contexts drawing on different data sources provide full support for the proposition that Machiavellian employees prefer forming transactional psychological contracts (schemas of their employee–employer relationship that are economic in nature) and that such contracts mediate the relationship between Machiavellianism and supervisor-rated (a) organizational citizenship behaviors and (b) deviant behaviors, respectively. The authors' research contributes to scholars' understanding of the theoretical underpinnings of the relationship between Machiavellianism and contextual performance as well as to the psychological contracts literature by demonstrating that Machiavellianism influences contextual

Acknowledgments: We thank Prashant Bordia, Chris Jackson, Sunghoon Kim, Maria Kraimer, Stephan J. Motowidlo, Kristin Scott, and Randy Sparks for helpful suggestions and Patrick Garcia and Lemuel Toledano for research assistance. Earlier versions of this manuscript were presented at the 2008 Academy of Management Conference and the 2010 Psychological Contract Group Meeting. This research was supported by the Australian Research Council Grant DP1094023 awarded to the second author.

Corresponding author: Thomas J. Zagenczyk, Department of Management, Clemson University, Clemson, SC 29634-1305, USA.

E-mail: thomasj@clemson.edu

1098

performance because it affects the manner in which employees construe their employment relationships.

**Keywords:** Machiavellianism; psychological contracts; organizational citizenship behavior; OCB; deviance; task performance

In The Prince (1513/1981), Machiavelli suggested that rulers able to ignore their ethics and values would be more successful than those who rule truthfully and honestly. In the present day, individuals who demonstrate a lack of concern for conventional morality, are emotionally detached, and tend to manipulate others are said to have high levels of the personality trait Machiavellianism (Christie & Geis, 1970). The study of Machiavellianism proliferated in the 1970s after initial studies by Christie and Geis (1970: 312) yielded a personality construct with three dimensions: (a) endorsement of deception and manipulation, (b) a cynical perspective on human nature, and (c) a disregard for conventional morality. Christie and Geis concluded from their studies that high Machs (employees with high levels of Machiavellianism) "manipulate more, win more, are persuaded less, persuade others more, and otherwise differ significantly from their low Machiavellian counterparts." Subsequent research has isolated important differences between high Machs and low Machs (individuals with low levels of Machiavellianism). For example, high Machs tend to have higher levels of mistrust, cynicism, egocentricity, and propensity for interpersonal manipulation (McHoskey, 1999), as well as interpersonal coldness (Wiggins & Broughton, 1985), narcissism (McHoskey, 1995), anxiety (Fehr, Samsom, & Paulhus, 1992), and external locus of control (Mudrack, 1990).

In the field of management, scholars' interest in Machiavellianism originated from its alleged relationship with work performance. In line with Machiavelli's reasoning and the findings of early Machiavellianism research, scholars have hypothesized that—compared to low Machs—employees with high levels of Machiavellianism should exhibit higher levels of performance at work because they tend to manipulate (Christie & Geis, 1970; Wilson, Near, & Miller, 1996), lack empathy (Paal & Bereczkei, 2007), prefer opportunism to cooperation (Sakalaki, Richardson, & Thepaut, 2007), engage in revenge-seeking behavior (Meyer, 1992), and are less likely to reciprocate favors (Meyer, 1992). Yet three decades of research have yielded inconclusive results, with some studies showing Machiavellianism to be positively related to work performance (e.g., Dahling, Whitaker, & Levy, 2009; Turner & Martinez, 1977), others demonstrating a negative relationship (Gable & Topol, 1988; Topol & Gable, 1990), and a third set of studies reporting no relationship at all (e.g., Gable & Topol, 1991; Gemmill & Heisler, 1972; Hunt & Chonko, 1984).

We suspect that a crucial piece in this still-to-be-solved puzzle is related to how these studies have operationalized work performance. While solving the puzzle is beyond the scope of this article, we intend to stimulate academic debate by proposing a new direction in Machiavellianism-work performance research. In this article, we argue and examine whether the characteristics and tendencies of high and low Mach employees might be more relevant for contextual performance (i.e., organizational citizenship behavior and workplace deviance) than for task performance. Our reasoning builds on arguments postulated by Motowidlo, Borman, and Schmit (1997) in their theory of individual differences in task and contextual performance, which specifies divergent relationships between the two performance domains and personality and cognitive ability variables, respectively. Specifically, while both personality and cognitive ability variables represent basic tendencies that are generally expressed through characteristic adaptations (such as schemas, attitudes, and habits), their particular concomitant adaptations differ (e.g., *task* skill for cognitive ability variables vs. *contextual* skill for personality variables), and these divergent adaptations are in turn differently related to task and contextual performance (e.g., *task* skills are relevant for task performance and *contextual* skills are relevant for contextual performance). In other words, the theory posits that it is personality variables that decisively affect contextual performance, whereas cognitive ability variables exert an influence on task performance (for an illustration see Figure 1 in Motowidlo et al., 1997: 79).

Drawing on this framework, we posit that Machiavellianism (a basic tendency) will be related to contextual performance because of its association with work-related schemas (characteristic adaptations) that encapsulate employees' beliefs about the exchange relationships they maintain with their organizations (i.e., their psychological contracts; Rousseau, 2001). More precisely, we argue that Machiavellian employees tend to form transactional psychological contracts (employment schemas that are economic in nature) and that such contracts will mediate the relationship between Machiavellianism and the two main forms of contextual performance, organizational citizenship behaviors (OCBs) and deviant behaviors.

We examine our predictions in a programmatic series of four studies employing four different samples of working adults. In Study 1, we explore whether transactional psychological contracts mediate the relationship between Machiavellianism (Mach) and peer-rated OCBs using a sample of call center employees. In Study 2, we consider negative contextual performance in the form of supervisor-rated deviant behaviors and contrast the mediating potential of transactional and relational psychological contracts on the relationships among Mach, OCB, deviance, and in-role performance (supervisor rated) utilizing data from employees who work in a wide range of occupational clusters. In Study 3, we take a step toward constructive replication (Lykken, 1968) of our Study 2 results by utilizing a different measure of Machiavellianism in a sample drawn from banking employees. Finally, Study 4 builds on Study 3 by testing our predictions with data obtained from three data sources. That is, Machiavellianism was measured using self-reports; transactional and relational psychological contracts were assessed using coworker reports; and OCBs, in-role performance, and deviance were measured using supervisor reports. Altogether, the use of a multisample design and multisource data enables a strong test of the proposed model and can better ascertain the internal validity of the results.

# Theory and Hypotheses

# Machiavellianism and Contextual Performance

As the central thesis of our study, we argue that the tendencies of high Mach employees are more likely to have implications for *contextual* performance as opposed to *task* performance. Accordingly, we draw on the work by Motowidlo and colleagues (1997), which suggests that work performance should be differentiated into two domains: task

performance and contextual performance domains. Task performance denotes activities that affect the organization's technical core as employees either execute technical processes or maintain and service technical requirements. In contrast, contextual performance refers to behaviors that are not officially sanctioned but affect the broader work environment (Motowidlo et al., 1997). Contextual performance has both positive and negative dimensions, typically referred to as OCBs and workplace deviance (Berry, Ones, & Sackett, 2007). OCBs are defined as behaviors that exceed in-role requirements and are not explicitly recognized by the formal reward system but facilitate organizational functioning (Organ, 1988), whereas workplace deviance is defined as "voluntary behavior that violates significant organizational norms and, in so doing, threatens the well-being of an organization, its members, or both" (Robinson & Bennett, 1995: 556).

In linking individual differences to the two performance domains, Motowidlo et al. (1997) suggest that an individual's basic tendencies find their expressions in particular characteristic adaptations, which in turn differentially influence task and contextual performance. Basic tendencies are defined as relatively stable "abstractions that define potential for observable behavior" (Motowidlo et al., 1997: 78) and include sensory-motor capacities, physical abilities, perceptual styles, learning ability, verbal ability, spatial ability, and personality traits. As a general principle, basic tendencies become observable when they are expressed as characteristic adaptations. However, it is important to note that not all basic tendencies share the same characteristic adaptations. Quite to the contrary, different basic tendencies are associated with different characteristic adaptations, which are linked differently to—and hence have different implications for—the two performance domains. To this effect, the theory postulates that a given cognitive ability variable (a basic tendency) is strongly associated with characteristic adaptations such as task knowledge, task skills, and task habits, whereas a given personality variable (a different basic tendency) is strongly associated with contextual knowledge, contextual skills, and contextual habits. Furthermore, because of their almost exclusive links with task-relevant adaptations, cognitive ability variables are posited to predominantly affect task performance, while exerting little influence on contextual performance (for a comment on the strength of "crossover" effects, see Motowidlo et al., 1997: 79-80). Conversely, Motowidlo et al. (1997) argue—and Bergman, Donovan, Drasgow, Overton, and Henning (2008) demonstrate—that personality variables are highly relevant for contextual performance, but not for task performance. In fact, Motowidlo et al. (1997) suggest that personality variables and task performance are linked only in cases in which personality variables influence task habits (which in turn influence task performance). This linkage explains the relatively strong correlation evidenced between the personality variable conscientiousness (and its various dimensions) and task performance across a wide variety of jobs (e.g., Dudley, Orvis, Lebiecki, & Cortina, 2006). On the other hand, personality variables—which do not affect task habits but do affect the manner in which individuals interact with others (e.g., openness, agreeableness, emotional stability) have shown much weaker correlations with task performance (review in Ones, Dilcher, Viswesvaran, & Judge, 2007).

Drawing on the above reasoning, we now develop a theoretical rationale as to why Machiavellianism is linked to contextual performance outcomes such as OCBs and deviant behaviors in the workplace. We begin with the link to OCBs (Organ, 1988). To explain the antecedents of OCB, researchers often invoke social exchange theory (Blau, 1964) and the norm of reciprocity (Gouldner, 1960), a generalized moral norm that states that individuals should help (and not harm) those who help them. Accordingly, employees should feel obligated to engage in positive behaviors outside of their job descriptions when the organization provides favorable treatment (Organ, 1988). However, some research indicates that high Mach employees may respond differently under such circumstances. For example, high Mach individuals tend to ignore the positive reciprocity norm (Gunnthorsdottir, McCabe, & Smith, 2002), which suggests that they will be less likely to help the organization in response to favorable treatment. Support for this proposition can be derived from research that shows that Machiavellianism is negatively related to various prosocial behaviors among college students, such as sharing class notes (McHoskey, 1999). Furthermore, high Mach employees tend to be interpersonally cold (Wiggins & Broughton, 1985) and lack empathy for others (Paal & Bereczkei, 2007), which suggests that they will be less apt to help others or the organization. As a result, we expect that Machiavellianism will be negatively related to OCB.

Social exchange theory is also used as a theoretical rationale for explaining deviant work behaviors (e.g., Bordia, Restubog, & Tang, 2008). Unlike OCB, however, deviance is generally construed to be the result of endorsing the negative reciprocity norm (Gouldner, 1960), which suggests that individuals respond to behavior that harms them with harm. Rather predictably, high Machs tend to endorse the negative reciprocity norm to a greater degree than do low Machs (Meyer, 1992). Yet receiving harm or otherwise unfavorable treatment from another is not a prerequisite for unfavorable treatment from a high Mach individual. For example, Gunnthorsdottir et al. (2002) demonstrated that low Mach individuals tend to return trusting behavior with trusting behavior, while individuals high in Machiavellianism are likely to take advantage of those who trust them (also see Harrell & Hartnagel, 1976). Given high Machs' tendency toward revenge and mistreatment of others, it is also unsurprising that Machiavellianism is positively related to antisocial behaviors such as plagiarism among college students (Meyer, 1992), theft (Fehr et al., 1992), and counterproductive work behaviors (Dahling et al., 2009). Thus, we expect that Machiavellianism will be positively related to workplace deviant behaviors.

## The Mediating Role of Psychological Contract Type

If "characteristic adaptations mediate the effects of basic tendencies on contextual performance" (Bergman et al., 2008: 230), the theoretical question arises as to which *specific* characteristic adaptation might underlie a specific linkage. In the case of Machiavellianism, we suggest that the key to developing a suitable rationale lies with understanding how this personality variable affects an employee's construal of the employment relationship with the organization. Consequently, we now discuss how Machiavellianism affects an employee's *psychological contract*.

Psychological contract theory suggests that employment relationships can be conceived of as social exchanges governed by the reciprocity norm (Gouldner, 1960) in which employees trade their work-related efforts for tangible and social rewards from an organization (e.g., Blau, 1964). The particular terms of such employee—organization exchange relationships are

encapsulated in psychological contracts, which refer to employees' relatively stable schemas of the perceived promises employees believe the organization has made to them in exchange for their contributions (Rousseau, 2001). Psychological contracts have been shown to have significant ramifications for work-related outcomes (e.g., commitment, performance, satisfaction) that vary substantially as a function of the type of contract endorsed by an employee, namely transactional (i.e., short-term and economic) or relational (i.e., long-term and socio-emotional; Millward & Hopkins, 1998; Raja, Johns, & Ntalianis, 2004; Rousseau, 2001). More specifically, transactional contracts are based on an exchange of economic currency and include an organization's provision of adequate compensation, working conditions, and reasonable guarantees of short-term employment in exchange for employee fulfillment of his or her contractual work obligations. In contrast, in relational psychological contracts, organizations provide training, professional development, and job security in exchange for employee fulfillment of less-specified role obligations (Rousseau, 2001).

In view of the consequences of psychological contracts for work outcomes, researchers have also sought to better understand the factors underlying employees' preferences for one contract type over another (e.g., Raja et al., 2004). Given that psychological contracts are highly personal and idiosyncratic by nature (cf. Rousseau, 2001), Raja and colleagues (2004) point out that personality has the capacity to shape not only employees' choices of employment relationships but also the perceptual construal of their contract. In building on Raja et al.'s argument, we submit that these two functions of personality manifest themselves differently for high and low Mach employees, thus accounting for their divergent preferences with regard to psychological contract type and their propensity to engage in citizenship and deviance at work.

Regarding psychological contract choice, Raja and colleagues (2004) reason that an employee arrives at a specific psychological contract because his or her personality drives important choices during job searches and negotiations. Such reasoning is supported by a variety of empirical works. For instance, several studies have shown that high Mach employees prefer working in control-oriented professions, such as management and law (Corzine, 1997; Fehr et al., 1992), while low Machs prefer helping professions (Steininger & Eisenberg, 1976; Zook & Sipps, 1987). Similarly, McHoskey (1999) found that Machiavellianism was negatively associated with intended time spent on developing meaningful social relationships, perhaps because high Machs tend to adopt an emotionally detached and pragmatic interpersonal style (Geis, 1978). Indeed, a study by Wilson and colleagues (1996) revealed that high Mach employees try to keep group members from knowing who they truly are and will even move on to another group when information about their true nature comes to light. In using high Machs' preference for transactional social relationships as a parallel, we contend that high Mach employees will exhibit a preference for transactional contracts in employment situations.

With respect to psychological contract construal, personality plays a role in that it influences both which contract elements employees perceive as most relevant and which contract type they maintain with an organization long-term (Raja et al., 2004). We conceive of these influences as also suggesting that high Mach employees will (again) prefer transactional contracts. Specifically, we believe that high Mach employees are likely to construe their employment relationships as being transactional in nature because of their focus on economic exchanges that are profitable for them and their disinterest in relationships that do not support the profit motive. In support, McHoskey (1999) found high Machs were more concerned with financial success than fulfilling intrinsic goals, while Sakalaki et al. (2007) showed that high Machs prefer economic opportunism to cooperation (also see Paal & Bereczkei, 2007). Taken together, we build on the presented arguments and evidence to offer the following hypotheses:

Hypothesis 1: Transactional psychological contract type will mediate the relationship between Machiavellianism and OCBs such that the relationship between Machiavellianism and transactional contract type will be positive and the relationship between transactional contract type and OCBs will be negative.

Hypothesis 2: Transactional psychological contract type will mediate the relationship between Machiavellianism and organizational deviance such that the relationship between Machiavellianism and transactional contract type will be positive and the relationship between transactional contract type and organizational deviance will be positive.

# Study 1

#### Method

## Participants and Procedure

Data were collected from a large call center organization in the Philippines. Each participant received a survey pack comprising an information sheet (stating the study's aim and assuring confidentiality and voluntariness of participation), a self-report questionnaire, and a behavioral rating form that the employee was to give to a coworker and supervisor to complete. Surveys were distributed to a total of 400 employees, of which 339 completed the surveys (response rate = 84.8%). In the coworker behavioral rating form, questions about the extent to which the focal employee engaged in OCBs were presented. Coworkers were nominated by the immediate supervisor. Specifically, the nominated coworkers were those who interacted with the focal employee on a work-related basis and were able to observe that employee's work behaviors.

A total of 88 peers provided behavioral OCB ratings, with each rating one to three coworkers. To address the issue of nonindependence in the criterion data, we conducted a one-way ANOVA. Our results showed no significant differences in OCB ratings across peers, F(87, 111) = 1.19, ns. In addition, the immediate supervisor was sent a brief employee performance questionnaire to complete. A total of 143 supervisors participated and provided performance ratings. Univariate analysis showed no significant differences in performance ratings across supervisors, F(87, 111) = 1.43, ns. Altogether, we obtained 199 matched responses, each including a supervisory evaluation of task performance, a coworker evaluation of OCB, and an employee report of the extent to which they were Machiavellian. Of the participating employees, 56% were female, with the majority of employees (65.1%) being 21 to 25 years old. Approximately 92% of the participants had been working 1 to 5 years for the organization.

#### Measures

Employees responded to all questions using Likert-type scales ranging from 1 (strongly disagree) to 7 (strongly agree). Space and time limitations imposed by the participating organization forced the shortening of some scales.

Machiavellianism. Machiavellianism was measured using a 5-item scale developed by Valentine and Fleischman (2003) based on the 20-item Mach IV scale (Christie & Geis, 1970). A sample item reads, "Never tell anyone the real reason you did something unless it is useful to you" ( $\alpha = .71$ ). To examine whether the shortened measure of Machiavellianism was equivalent to the 20-item measure in the present setting, we administered both scales to an independent sample of 150 fast-food workers in the Philippines. Bivariate correlations suggest that the short and long versions correlate highly (r = .80, p < .001).

Transactional psychological contracts. Transactional psychological contract was measured using a nine-item scale published by Raja and colleagues (2004). An example item is, "I work only the hours set out in my contract and no more" ( $\alpha = .79$ ).

Organizational citizenship behaviors. We utilized a 20-item scale developed by Podsakoff, MacKenzie, Moorman, and Fetter (1990) to assess OCBs. A sample item is, "This employee helps others who have been absent." We requested that peers report the extent to which a focal employee engaged in OCBs ( $\alpha = .84$ ).

Task performance. We used a four-item scale developed by Williams and Anderson (1991; also see Restubog, Bordia, & Tang, 2006) to assess employee performance. We asked immediate supervisors to report the level of performance of each of their subordinates. A sample item is, "This employee adequately completes assigned duties" ( $\alpha = .92$ ).

Control variables. Consistent with previous research on OCBs (e.g., Podsakoff et al., 1990), we controlled for the effects of demographic variables in our analysis (i.e., gender, age, and tenure).

#### Results

Means, standard deviations, and correlations among the study variables are presented in Table 1 (see the top section). Zero-order correlations were all in the expected directions. To test Hypothesis 1 and thus the efficacy of our proposed mediator, we followed Baron and Kenny's (1986) three-step procedure that assesses the necessary conditions for mediation via three separate regression equations. The first condition requires that the independent variable must significantly predict the proposed mediator. In our regression analyses (Table 2), we found support for the positive relationship between Mach and transactional psychological contracts ( $\beta = .30$ , p < .001). The second condition stipulates that the independent variable must significantly predict the outcome variable. In the second equation, Mach was negatively associated with peer-rated OCBs ( $\beta = -.15$ , p < .05), thereby supporting the second

Table 1 Means, Standard Deviations, and Correlations of Variables in Studies 1, 2, 3, and 4

Variable	M	SD	1	2	3	4	5	6	7	8	9
Study 1 (N = 199)											
1. Gender <sup>a</sup>	1.56	0.49									
2. Age <sup>b</sup>	2.42	0.82	02								
3. Tenure <sup>c</sup>	1.48	0.71	.00	14							
<ol><li>Machiavellianism</li></ol>	3.30	0.76	11	04	06	(.71)					
<ol><li>Transactional contract</li></ol>	3.47	0.87	12	12	.13	.30***	(.79)				
<ol><li>Peer-rated OCBs</li></ol>	4.95	0.61	.11	.17*	06	16*	37***	(.85)			
<ol><li>Supervisor-rated task</li></ol>	5.50	0.92	.08	05	22***	13	08	.24***	(.92)		
performance											
Study 2 ( $N = 156$ )											
1. Gender	1.51	0.50									
2. Age	29.77	9.27	.07								
3. Tenure	5.51	8.05	.13	.82***							
<ol><li>Machiavellianism</li></ol>	3.79	0.96	16*	09	.01	(.85)					
<ol><li>Transactional contract</li></ol>	3.94	0.99	17*	14	10	.59***	(.80)				
<ol><li>Relational contract</li></ol>	5.05	1.16	.19*	.12	.01	06	18*	(.90)			
<ol><li>Supervisor-rated OCBs</li></ol>	4.93	1.03	.22**	.03	.15	31***	35***	.07	(.82)		
8. Supervisor-rated deviance	1.95	1.00	.03	04	11	.17*	.23**	03	70***	(.85)	
<ol><li>Supervisor-rated task</li></ol>	6.00	1.17	.01	07	05	.01	.09	.03	.31***	42***	(.63)
performance											
Study 3 ( $N = 152$ )											
1. Gender	1.57	0.49									
2. Age	32.52	10.74	.02								
3. Tenure	2.39	1.72	.20*	.62***							
<ol><li>Machiavellianism</li></ol>	3.54	1.00	16*	25**	25**	(.88)					
<ol><li>Transactional contract</li></ol>	3.08	0.99	04	35***	31***	.46***	(.79)				
<ol><li>Relational contract</li></ol>	5.40	0.82	.05	.07	05	.06	32***	(.82)			
7. Supervisor-rated civic virtue	5.48	0.98	.01	.31***	.28***	28***	35***	.00	(.81)		
8. Supervisor-rated deviance	1.84	0.98	.02	05	01	.27***	.23**	.05	42***	(.87)	
<ol><li>Supervisor-rated task performance</li></ol>	5.08	0.99	02	.17*	.21**	04	12	07	.56***	39	(.90)
Study 4 ( $N = 259$ )											
1. Gender	1.65	0.48									
2. Age	30.74	8.11	.13*								
3. Tenure	2.55	1.39	.11	.65***							
4. Machiavellianism	3.67	0.68		12	.06	(.79)					
5. Peer-rated transactional	3.97		16*	18**	12*	.20***	(.74)				
contract	3.71	0.03	.10	.10	.12	.20	(./=)				
6. Peer-rated relational contracts	5.37	0.84	04	.15*	.06	10	24***	(.88)			
7. Supervisor-rated OCBs	5.25	0.71	.02	.13*	.06	17**	43***	.39***	(.88)		
8. Supervisor-rated task	5.60	0.89	09	.04	01	08	16*	.27***	.60***	(.86)	
performance											
Supervisor-rated deviance	2.46	1.46	04	.01	.11	.20**	.33***	21***	43***	27***	(.94)

Note: OCB = organizational citizenship behavior. Reliability coefficients are shown on the diagonal in parentheses.

condition. The third condition requires that the relationship between the independent variable and the dependent variable should be significantly weaker or nonsignificant when the proposed mediator is included in the regression equation. In the third equation, when peer-rated

 $<sup>^{</sup>a}$ Gender: male = 1, female = 2.

<sup>&</sup>lt;sup>b</sup>Age: 1 = 20 years and younger, 2 = 21-25 years, 3 = 26-30 years, 4 = 31-35 years, 5 = 36-40 years, 6 = 41-45 years, 7 = 46-50 years, and 8 = older than 50 years.

Tenure: 1 = less than 1 year, 2 = 1-5 years, 3 = 6-10 years, 4 = 11-15 years, 5 = 16-20 years, 6 = 21-25 years, 7 = 26-30 years, 8 = more than 30 years.

<sup>\*</sup>p < .05, two-tailed. \*\*p < .01, two-tailed. \*\*\*p < .001, two-tailed.

	Condition 1	Sebs) in study 1	$\frac{\text{Condition 3}}{\text{Mach and Transactional}}$ $\frac{\text{Contract} \to \text{OCBs}}{\text{Contract}}$		
Mediation Conditions	Mach → Transactional	Condition 2			
Models	Psychological Contract	$Mach \rightarrow OCBs$			
Gender <sup>a</sup>	08				
$Age^b$	09				
Tenure <sup>c</sup>	.13				
Machiavellianism (Mach)	.30***				
Model R <sup>2</sup>	.10***				
Gender		.10			
Age		.16*			
Tenure		05			
Machiavellianism		15*			
Model R <sup>2</sup>		.07*			
Gender			.08		
Age			.13		
Tenure			.00		
Machiavellianism			05		
Transactional contract			33***		
Model R <sup>2</sup>			.16***		

Table 2 Mediated Regression Analyses for Peer-Rated Organizational Citizenshin Behaviors (OCBs) in Study 1

*Note:* N = 199. Values are standardized estimates from final step of analysis.

OCB was regressed on both Mach (independent variable) and transactional psychological contracts (mediator) simultaneously, the effect of transactional psychological contracts  $(\beta = -.33, p < .001)$  remained significant, whereas the effect of Mach  $(\beta = -.05, ns)$  became nonsignificant. We supplemented our analysis with Preacher and Hayes's (2008) bootstrapping approach because it does not rely on the assumption that indirect effects are normally distributed. Accordingly, the indirect effect from Mach and peer-rated OCBs via transactional psychological contracts was significant (specific indirect effect = -.08, p < .01; with 95% bootstrap confidence interval ranging from -.14 to -.04). Overall, results from Study 1 provided support for Hypothesis 1. In addition, we did not find any significant relationship between Mach and supervisor-rated task performance (r = -.13, ns, from Table 1, Study 1)correlation matrix).

# Study 2

The aim of Study 2 was to build on Study 1 in three important ways: (a) we sought to increase external generalizability by testing our hypotheses with data collected from multiple occupational groups (instead of using data collected at one site as was the case in the first

<sup>&</sup>lt;sup>a</sup>Gender: male = 1, female = 2.

<sup>&</sup>lt;sup>b</sup>Age: 1 = 20 years and younger, 2 = 21-25 years, 3 = 26-30 years, 4 = 31-35 years, 5 = 36-40 years, 6 = 41-45 years, 7 = 46-50 years, and 8 = older than 50 years.

Tenure: 1 = less than 1 year, 2 = 1-5 years, 3 = 6-10 years, 4 = 11-15 years, 5 = 16-20 years, 6 = 21-25 years, 7 = 16-20 years26-30 years, 8 = more than 30 years.

<sup>\*</sup>p < .05, two-tailed. \*\*\*p < .001, two-tailed.

study), (b) we expanded our analyses to include negative contextual performance in the form deviant behaviors directed at the organization, and (c) we included relational psychological contracts in our analyses to account for the possibility that high Mach employees may form such contracts to create trusting relationships with the organization—perhaps to place them in a position from which they can take advantage of the organization later (cf. Wilson et al., 1996).

#### Method

## Participants and Procedure

As part of an applied project, we distributed survey kits to 250 organizational members of a large management professional organization in the Philippines. The survey kit contained an information sheet, which stated study goals and assured confidentiality and a self-report questionnaire that comprised the independent variable measures (i.e., demographic variables, Machiavellianism, and psychological contract types). We received a total of 193 completed self-report surveys, representing a response rate of 77.2%. A month later, we sent behavioral rating forms to 193 participants to be filled out by their supervisor. The behavioral rating form assessed the participant's organizational citizenship, deviant behaviors, and task performance. Supervisors returned the completed form using prepaid reply envelopes. We received a total of 161 completed supervisor behavioral rating forms, representing a response rate of 83.42%. We matched the collected data via an anonymous code that all participants had included on both their survey and the supervisory form. Five supervisor behavioral rating forms were excluded because of wrong or missing identity codes. Altogether, we were able to match 156 of the 250 subordinate—supervisor surveys from the two stages of data collection.

Participants represented a broad range of business sectors in the Philippines (as classified by the Personnel Management Association of the Philippines), such as education (7.1%), manufacturing (19.2%), finance and banking (24.4%), government and public service (7.1%), hospitality (7.1%), information technology and telecommunications (9.6%), and retail and sales (25.5%). Gender distribution was almost even (51% female), with respondents averaging 29.8 years of age and representing a fairly well-educated sample (high school diploma = 10.9%, vocational training = 10.3%, college degree = 67.1%, master's degree = 5.1%, and other professional qualifications = 5.8%; 1.2% failed to report their educational level). Mean organizational tenure was 5.5 years.

#### Measures

Questionnaires were prepared in English. Participants responded to all items using 7-point Likert-type scales ranging from 1 (*strongly degree*) to 7 (*strongly agree*). Machiavellianism was assessed using the 20-item scale developed by Christie and Geis (1970;  $\alpha$  = .85). In addition to the same 9-item transactional psychological contract scale ( $\alpha$  = .80) from Study 1, we used a 9-item relational psychological contract scale also developed by Raja and colleagues (2004). An example item is, "I expect to grow in this organization" ( $\alpha$  = .90). One month after employees had completed the self-report questionnaire, we requested that direct

supervisors rate the employees' organizational citizenship, task performance, and deviant behaviors. As in Study 1, we used Podsakoff et al.'s (1990) 20-item scale to measure OCBs  $(\alpha = .82)$ . An 8-item scale developed by Aquino, Lewis, and Bradfield (1999) was utilized to measure organizational deviance ( $\alpha = .85$ ). A sample item is, "This employee arrived late for work." We asked supervisors to rate their employees' task performance along two dimensions (Kraimer, Wayne, Liden, & Sparrowe, 2005): quality of work and quantity of work ( $\alpha = .63$ ).

#### Results

Means, standard deviations, and zero-order correlations for the study's variables are depicted in the second section of Table 1. We controlled for gender, age, and tenure in our analysis. The results of the mediation analyses are presented in Table 3. Satisfying the first condition for establishing mediation (Baron & Kenny, 1986), the relationship between Mach and transactional psychological contracts was positive and significant ( $\beta = .57$ , p < .001). However, the relationship between Mach and relational psychological contracts was not significant (r = .00, ns), thereby violating the first condition and thus precluding further testing of relational psychological contracts as a potential mediator. In continuing our mediational analyses, results showed that Mach was negatively related to supervisor-rated OCBs ( $\beta = -.33$ , p < .001) over and above the effects of the demographic variables. Similarly, we found a positive association with supervisor-rated organizational deviance ( $\beta = .19$ , p < .05), thereby meeting the second condition for establishing mediation. To test the third condition, we regressed each of the "remaining" dependent variables (i.e., supervisor-rated OCBs and supervisor-rated organizational deviance) on the mediator (transactional psychological contracts) along with the independent variable (Mach). When transactional psychological contract was included in the equation, the beta coefficient representing the relationship between Mach and the dependent variables decreased from -.33 (p < .001) in the first step to -.17 (ns) in the second step for supervisor-rated OCBs and from .19 (p < .05) in the first step to .08 (ns) in the second step for supervisor-rated deviance, respectively. Furthermore, while the beta weight of Mach became insignificant, the transactional contracts variable continued to be significant for both supervisor-rated OCBs ( $\beta = -.24$ , p < .05) and deviance  $(\beta = .20, p < .05)$ . In addition and paralleling the findings in Study 1, our Study 2 results showed that the relationship between Mach and supervisor-rated task performance was again not significant (r = .01, ns, from Table 1, Study 2).

We complemented these analyses by assessing the indirect effects of the two potential mediators (i.e., transactional and relational psychological contracts) using Preacher and Hayes's (2008) bootstrapping approach for multiple mediator models. This approach enables an estimation of the indirect effects of multiple mediators and does not rely on the assumption that the total and indirect effects are normally distributed. For supervisor-rated OCBs, examination of the respective coefficient showed a significant specific indirect effect for transactional psychological contract, thus lending support for the mediating role of transactional psychological contract between employees' Mach and supervisor-rated OCBs (specific indirect effect = -.18, p < .05; with 95% bootstrap confidence interval ranging from -.31 to -.04). Conversely, the coefficient for the indirect path from employees' Mach

Table 3
Mediated Regression Analyses for Supervisor-Rated Organizational
Citizenship Behaviors (OCBs) and Deviance in Study 2
and Civic Virtue and Deviance in Study 3

	Testi	iation through ontracts for OC		Testing Mediation through Psychological Contracts for Deviance				
	Condit	ion 1			Condit	ion 1		
Mediation Conditions	Mach → Psychological Contracts		Condition 3		Mach → Psychological		Condition 2	Condition 3
Models			Mach →	Mach and Contracts →	Contracts		Mach →	Mach and Contracts →
Study 2	$Trans^{b}$	Relat <sup>c</sup>	OCBs <sup>a</sup>	OCBs	Trans	Relat	Deviance	Deviance
Gender	15	.20*	08	11	15	.20*	.10	.12
Age	17	.34*	18	17	17	.34*	.19	.18
Tenure	.14	14	.19*	.18	10	.10	20	17
Machiavellianism	.57***	.00	33***	17	.59***	06	.19*	.08
Transactional contract				24*				.20*
Relational contract				.07				04
Model R <sup>2</sup>	.36***	.07	.13***	.17*	.35***	.00	.05*	.08*
Study 3	Trans	Relat			Trans	Relat		
Gender	.00	.09	05	.03	.00	.09	.06	.04
Age	19*	.18	.17	.14	19*	.18	.00	.01
Tenure	10	17	.13	.09	10	17	.06	.08
Machiavellianism	.39***	.06	21**	11	.39***	.08	.30***	.13
Transactional contract				25*				.22*
Relational contract				08				.10
Model R <sup>2</sup>	.28***	.03	.15***	.19*	.28***	.03	.08***	.11*

*Note:* Study 2 N = 156; Study 3 N = 152. Standardized estimates are shown.

to supervisor-rated OCBs via relational psychological contract was nonsignificant (*specific indirect effect* = .00, ns; with 95% bootstrap confidence interval of -.02 to .01), thereby indicating that relational psychological contract did not mediate the relationship between employees' Mach and supervisor-rated OCBs.

Next, we assessed the indirect effects of the two potential mediators between supervisors' Mach and supervisor-rated organizational deviance. The specific indirect effect linking employees' Mach with supervisor-rated organizational deviance via transactional psychological contract was significant (*specific indirect effect* = .13, p < .05; with 95% bootstrap confidence interval ranging from .04 to .26). In contrast, the indirect effect from employees' Mach to supervisor-rated organizational deviance via relational psychological contract was not significant (*specific indirect effect* = .00, ns; with 95% bootstrap confidence

<sup>&</sup>lt;sup>a</sup>In Study 3, OCBs were assessed via civic virtue dimension.

<sup>&</sup>lt;sup>b</sup>Trans = transactional psychological contract.

<sup>&</sup>lt;sup>c</sup>Relat = relational contract.

<sup>\*</sup>p < .05, two-tailed. \*\*p < .01, two-tailed. \*\*\*p < .001, two-tailed.

interval ranging from -.02 to .03). Overall, our results from Study 2 provided support for Hypotheses 1 and 2.

# Study 3

Study 3 builds on Studies 1 and 2 in several important ways. First, we aimed to replicate the mediating effect of transactional psychological contracts on OCBs and organizational deviance found in the previous two studies. Second, we used a different Mach measure in Study 3. Following our data collections for Studies 1 and 2, Dahling et al. (2009) introduced a new measure of Machiavellianism, which addressed several psychometric issues plaguing the widely used Mach IV scale (Christie & Geis, 1970) that were related to the scale's reliability, dimensionality, and items. We therefore sought to replicate our results from Studies 1 and 2 in a third study to render our findings comparable to both past research on Machiavellianism—which predominantly used the Mach IV—as well as future research that employs Dahling et al.'s (2009) new Machiavellianism measure.

#### Method

## Participants and Procedure

Survey questionnaires were administered to 196 frontline bank employees in the Philippines who were participating in a development program unrelated to the current research. In all, 170 employees opted to complete the surveys, representing a response rate of 86.7%. They were instructed to place the completed survey in a blank envelope and return it directly to the research team. In addition, they were given a sealed envelope containing behavioral questions that was to be given to their immediate supervisors. We requested that supervisors provide information concerning various work behaviors (e.g., OCBs, organizational deviance, and task performance) of the subordinate who distributed the sealed questionnaire. Supervisors returned the questionnaire via mail in an enclosed, preaddressed, and postage-paid envelope. A total of 152 supervisors completed and returned the employee behavioral questionnaire, for a response rate of 89.4%. We matched the supervisor and subordinate surveys via an anonymous code that each participate had included, resulting in 152 matched survey pairs. Both supervisors and subordinates were informed that their responses would be kept confidential and would not affect their employment status or organization in any way. Among the 152 subordinate participants, ages ranged between 18 and 59 (M = 32.72), and 56.6% were females. Approximately 72% of employees had been working in their organization between 1 and 5 years.

#### Measures

Questionnaires were prepared in English. Participants responded to all items using 7-point Likert-type scales ranging from 1 (strongly degree) to 7 (strongly agree). Machiavellianism was assessed using the 16-item scale developed by Dahling et al. (2009). Initial research demonstrated not only the scale's reliability but also that it is related to a wide variety of work outcomes (Dahling et al., 2009). An example item from this scale is, "I am willing to sabotage the efforts of other people if they threaten my own goals" ( $\alpha = .88$ ). As in Study 1 and/or Study 2, transactional and relational psychological contracts were assessed using the same 9-item scales ( $\alpha = .79$  and  $\alpha = .82$ , respectively) developed by Raja and colleagues (2004). Supervisors were requested to assess civic virtue behavior, organizational deviance, and task performance. A 4-item measure designed by Podsakoff et al. (1990) was used to measure civic virtue behavior. We used the measure of civic virtue because of organizational concerns related to the length of the 20-item OCB measure that was employed in Studies 1 and 2. A sample item from this scale is, "This employee attends functions that are not required, but help the company image." To examine whether the 4-item measure of civic virtue behavior ( $\alpha = .81$ ) was an adequate proxy of the 20-item full measure of OCBs (Podsakoff et al., 1990), we collected data from an independent sample of 178 sales personnel in the Philippines. Bivariate correlations suggested that the 4-item scale and the 20-item scale are highly correlated (r = .78, p < .001). Our approach receives further support from a study by Lepine, Erez, and Johnson (2002), who concluded from their meta-analytic results that OCB dimensions are strongly related to one another as well as to common antecedents of OCBs. Thus, we are confident that our measure is a satisfactory substitute of the longer OCB scale used in Studies 1 and 2. As in Study 2, organizational deviance was assessed with the 5 items ( $\alpha = .87$ ) used by Aquino et al. (1999). Task performance was measured using the same Williams and Anderson (1991) scale ( $\alpha = .90$ ) that was employed in Study 1.

#### Results

Descriptive statistics, intercorrelations, and reliability coefficients for the measures used in Study 3 are reported in the lower portion of Table 1. Satisfying Baron and Kenny's (1986) first condition for mediation, we found support for the significant relationship between Mach and transactional psychological contracts ( $\beta = .39$ , p < .001; see Table 3, Study 3). Paralleling findings in Study 2, the relationship between Mach and relational psychological contracts was not significant (r = .06, ns), thereby precluding further mediation tests involving relational contracts. As reported in Table 3, we found support for the negative association between Mach and supervisor-rated civic virtue behavior ( $\beta = -.21$ . p < .01) as well as the positive relationship between Mach and supervisor-rated organizational deviance  $(\beta = .30, p < .001)$ , thus providing support for the second condition of mediation. To test the last condition, several regressions were estimated for each of the two dependent variables, that is, once with and once without the hypothesized mediator. When transactional psychological contract was entered in the equation, the beta coefficient representing the relationship between Mach and the dependent variables decreased from  $\beta = -.21$  (p < .01) in the second step to  $\beta = -.11$  (ns) in the third step for supervisor-rated civic virtue behavior and from  $\beta = .30$  (p < .001) in the second step to  $\beta = .13$  (ns) in the third step for supervisorrated organizational deviance. In addition, the beta weight for transactional psychological contracts continued to be significant in both analyses ( $\beta = -.25$ , p < .05, for civic virtue behavior;  $\beta = .22$ , p < .05, for organizational deviance).

As in Study 2, we assessed the significance of the indirect effects of the two potential mediators using the Preacher and Hayes's (2008) approach for testing multiple mediators. Specific indirect effects analyses showed that transactional psychological contract was a significant mediator between employees' Mach and supervisor-rated civic virtue behavior (specific indirect effect = -.15, p < .01; with 95% bootstrap confidence interval ranging from -.25 to -.07). In contrast, the indirect effect from employees' Mach to supervisor-rated civic virtue behavior via relational psychological contract was nonsignificant (specific indirect effect = -.01, ns; 95% bootstrap confidence interval of -.05 to .01).

Next, we assessed the indirect effects of the two mediators between employees' Mach and supervisor-rated organizational deviance. The specific indirect effect of transactional psychological contract linking employees' Mach with supervisor-rated organizational deviance was significant (specific indirect effect = .09, p < .01; with 95% bootstrap confidence interval ranging from .01 to .13). As in Study 2, the indirect effect involving relational psychological contract was not significant (specific indirect effect = .03, ns; with 95% bootstrap confidence interval of -.02 to .11). Overall, the results of Study 3 paralleled those for Study 2 by providing support for Hypotheses 1 and 2. Furthermore, as was the case in Studies 1 and 2, the relationship between Machiavellianism and supervisor-rated task performance was again nonsignificant (r = -.04, ns; see Table 1, Study 3).

# Study 4

We conducted a fourth study to examine the relationship between employee reports of personality, coworker ratings of the target employee's psychological contracts, and work performance. We wanted to determine whether coworkers tended to recognize that employees with varying levels of Machiavellianism have different conceptualizations of their employeremployee relationships as well. This was in part to account for the possibility that high Mach employees may respond in a socially desirable manner.

#### Method

#### Participants and Procedure

We surveyed 500 postdiploma and postgraduate students from a large university in the Philippines. As an inclusion criterion, we specified that participants had to be employed fulltime. Self-reported surveys were administered in class. Participants were also instructed to pass on a brief survey to their immediate supervisor and to nominate a coworker with whom they had regular interactions at work. Completed supervisor and coworker surveys were returned to the research team via a self-addressed, stamped envelope. Out of the 500 surveys disseminated, 350 were returned by employees, yielding a response rate of 70%. We matched supervisor and coworker surveys with employee surveys via an anonymous code that each participant had included on each survey form, which resulted in 259 matched employee-coworker-supervisor triads. Participants lacking either a coworker or supervisor rating form were deleted from the analysis. Employees were 64.9% female, were on average

30.71 years old, and had worked in a variety of occupations, including accounting and finance (11.6%), customer service (18.1%), legal services (0.8%), general management and human resources (14.3%), manufacturing and production (2.3%), public relations (3.1%), marketing and sales (26.3%), information technology (10.0%), research and development (2.3%), and others (e.g., media and entertainment, public sector, 10.8%; 0.4% did not report their occupation). A large majority of the participants (65.3%) had worked in their organization between 1 and 5 years.

#### Measures

The scale used to assess Machiavellian orientation ( $\alpha = .79$ ) was the same as the one employed in Study 3, while the measures for transactional ( $\alpha = .74$ ) and relational ( $\alpha = .88$ ) psychological contracts and organizational deviance ( $\alpha = .94$ ) were the same as those utilized in Studies 2 and 3. OCB ( $\alpha = .88$ ) and task performance ( $\alpha = .86$ ) measures were the same as those used in Study 1. Employees self-rated their Machiavellian orientation. Coworkers who interacted with the focal employee on a work-related basis provided ratings on the employees' transactional and relational psychological contracts. Supervisors provided ratings on the employees' OCBs, task performance, and organizational deviance. As in the previous studies, we controlled for the effects of gender, age, and tenure in our analyses.

#### Results

Descriptive statistics and zero-order correlations are reported in the bottom portion of Table 1. Similar to Studies 1 to 3, we ran a series of regression models to test for mediation effects (see Table 4). The first condition for mediation was supported given the significant relationship between Mach and peer-rated transactional psychological contracts ( $\beta = .18$ , p < .01). Paralleling findings in Studies 2 and 3, the association between Mach and peerrated relational psychological contracts was not significant (r = -.08, ns), thereby precluding further mediation analysis involving relational contracts. As reported in Table 4, we found evidence for a negative relationship between Mach and supervisor-rated OCBs ( $\beta = -.15$ , p < .05) as well as a positive association between Mach and supervisor-rated organizational deviance ( $\beta = .18$ , p < .01), providing support for the second condition of mediation. When peer-rated transactional psychological contract was entered into the equation, the beta coefficient representing the relationship between Mach and the dependent variables decreased from  $\beta = -.15$  (p < .05) in the second step to -.06 (ns) in the third step for supervisor-rated OCBs and from  $\beta = .18$  (p < .01) in the second step to  $\beta = .11$  (ns) in the third step for supervisor-rated organizational deviance. The beta weights for peer-rated transactional psychological contracts continued to be significant for both dependent variables ( $\beta = -.35$ , p < .001 for OCBs;  $\beta = .29$ , p < .001 for organizational deviance). The third condition for mediation was thus supported.

Similar to Studies 2 and 3, we assessed the significance of the indirect effects of the two potential mediators using Preacher and Hayes's (2008) approach for testing multiple mediators. Peer-rated transactional psychological contract was a significant mediator

.16\*\*\*

Citizenship Behaviors (OCBs) and Deviance in Study 4										
	Test	iation through I ontracts for OC	, .	Testing Mediation through Psychological Contracts for Deviance						
	Condition 1			Condition 3	Condition 1  Mach →			Condition 3		
	$Mach \rightarrow$						G 11:1 A			
Mediation Conditions	Psycho Contr	0	Condition 2	Mach and	- Psychological Contracts		Condition 2	Mach and		
			$Mach \rightarrow$	Contracts $\rightarrow$			$Mach \rightarrow$	$Contracts \rightarrow$		
Models	$Trans^{b}$	Relat <sup>c</sup>	OCBs	OCBs	Trans	Relat	Deviance	Deviance		
Age	12	.18*	.13	.03	12	.18*	05	.01		
Gender	13*	06	.00	03	13*	06	03	.00		
Tenure	04	05	02	02	04	05	.13	.14		
Machiavellianism	.18**	08	15*	06	.18**	08	.18**	.11		
Transactional contract				35***				.29***		
Relational				.29***				14*		

.28\*\*\*

.35\*\*\*

.00

.05\*\*

Table 4 Mediated Regression Analyses for Supervisor-Rated Organizational Citizenship Rehaviors (OCRs) and Deviance in Study 4

.35\*\*\* *Notes:* N = 259. Standardized estimates shown.

.00

.04\*

contract

Model R2

between (a) employees' Mach and supervisor-rated OCBs (specific indirect effect = -.07, p < .05; with 95% bootstrap confidence interval ranging from -.12 to -.02) and (b) employees' Mach and supervisor-rated organizational deviance (specific indirect effect = .11, p < .01; with 95% bootstrap confidence interval ranging from .04 to .22). In contrast, the indirect effects from employees' Mach to supervisor-rated OCBs (specific indirect effect = -.02, ns; 95% bootstrap confidence interval of -.07 to .01) and supervisor-rated organizational deviance (specific indirect effect = .02, ns; 95% bootstrap confidence interval of -.01 to .09) via peer-rated relational psychological contracts were nonsignificant. Paralleling the results of Studies 2 and 3, Study 4 provided support for both Hypothesis 1 and Hypothesis 2. Once more, the relationship between Machiavellianism and supervisor-rated task performance was not significant (r = -.08, ns, from Table 1, Study 4).

## **General Discussion**

#### Pattern of Results

As we face one of the most severe economic crises of recent times, it has become commonplace to portray business professionals as individuals who, if given the chance,

<sup>&</sup>lt;sup>a</sup>In Study 4, psychological contracts were assessed by coworkers.

<sup>&</sup>lt;sup>b</sup>Trans = transactional psychological contract.

<sup>&</sup>lt;sup>c</sup>Relat = relational psychological contract.

<sup>\*</sup>p < .05, two-tailed. \*\*p < .01, two-tailed. \*\*\*p < .001, two-tailed.

engage in purely self-interested behavior at the expense of others. It may thus hardly come as a surprise that "many a corporate chief has a copy [of Machiavelli's *The Prince*] near his bedside," as Hindle (2008: 116) notes in a recent *Economist* publication. These scheming exploits aside, the emergence of research on the "dark side" of organizational behavior over the past decade or so has also led to renewed interest in the concept of Machiavellianism and its potential ramifications in work settings (Dahling et al., 2009). Thus, the aim of the present research was to shed light on the relationships between Machiavellianism and three important facets of work performance: contextual performance in the form of OCBs and organizational deviance, plus task performance.

Drawing from Motowidlo et al.'s (1997) work, we argue that the general significance of Machiavellianism for job performance arises from its influence on employees' contextual performance because, like other personality traits, it affects the manner in which employees construe their employment relationships (cf. Raja et al., 2004). In the particular case of Machiavellian employees, this construal is expressed through a preference for transactional types of psychological contracts, which in turn are linked negatively to OCBs and positively to deviant work behaviors. Our findings indicate support for our reasoning as we found consistent result patterns across four studies involving different samples, raters, and variable measures. For instance, we found support for Hypothesis 1-suggesting that transactional psychological contracts would mediate the relationship between Machiavellianism and OCBs—among call center workers (Study 1), employees from a wide variety of occupations (Studies 2 and 4), and banking employees (Study 3), regardless of whether peers or supervisors evaluated the employees' OCBs. Likewise, our second hypothesis—suggesting that transactional psychological contracts would mediate the relationship between Machiavellianism and supervisor-rated organizational deviance—was supported in Studies 2 and 3 (drawing on employees' self-reports of their psychological contracts), plus in Study 4 (in which coworkers assessed the focal employee's psychological contract; this hypothesis was not tested in Study 1). Also noteworthy is the fact that Machiavellianism was not significantly related to task performance in any of the four studies. Collectively, our results suggest (a) that Machiavellianism is an important predictor of contextual performance (as opposed to task performance) and (b) that high Mach employees tend to make fewer positive contributions to and inflict greater harm on the organizational environment than low Mach employees.

It is furthermore instructive to compare our findings to those from the perhaps most comprehensive analysis of Machiavellianism and job performance found in the literature to date, compiled by Dahling and associates (2009). In their second study, these authors examined the direct relationships between Machiavellianism and (a) task performance, (b) counterproductive work behaviors, and (c) contextual performance. Their correlational analyses revealed that Mach was unrelated to both task performance (r = .11, ns) and contextual performance (r = .00, ns), yet was positively related to self-reported counterproductive work behaviors (r = .38, p < .001). Their findings differ from ours in two important ways. First, results of their regression analysis showed that high Machs with high tenure tended to have higher levels of task performance than low Machs with high tenure. This effect might be explained by range restriction resulting from attrition, as tenure may tap into "survival." That is, if an employee does not maintain average to above-average task performance, he or she may not remain with the organization. In our estimation, tenure could moderate the relationship

between most dispositional variables and task performance because only employees who have demonstrated certain levels of task-related competence will remain with the organization. Second, the results of Dahling and colleagues' (2009) study and our series of studies differ with respect to the relationship between Machiavellianism and OCBs. While Dahling and colleagues found no link between Machiavellianism and OCBs, a negative relationship between the two variables emerged consistently in our four studies. We speculate that these different findings may have occurred because the sample in the Dahling et al. study was composed of employed students. This demographic might have a higher chance of working under contingent employment arrangements (e.g., short-term, seasonal employment) that afford few opportunities and/or incentives to perform OCBs. Of course, we also submit that replication is preferable to speculation, thus indicating a need for further research in this area.

#### Theoretical Contributions

Our work makes several contributions to organizational research. Our first contribution pertains to the development of a rationale that accounts for the theoretical underpinnings of the relationship between Machiavellianism and contextual performance. That is, specifying why Mach matters will help scholars to theoretically understand the dynamics of high Mach employees' behaviors and allow practitioners to adapt interventions aimed at curbing potentially negative ramifications. In discussing the absence of a relationship between Machiavellianism and contextual performance in their own study, Dahling et al. (2009: 248) suggest that "the context of performance may play an important role in clarifying this relationship." To this end, our results provide some preliminary support for the notion that psychological contracts—representing a form of schema relevant for work settings—may embody the "context" that links Machiavellianism and contextual performance. In this regard, one benefit of our approach is that it is broader and more encompassing than previous research efforts. For instance, past research examining mitigating factors in the Mach-performance relationship has heavily, and perhaps too narrowly, focused on latitude for improvisation or proxies thereof as an explanatory mechanism (Hunt & Chonko, 1984; Schulz, 1993; Sparks, 1994), thus working under the assumption that the more latitude to manipulate others high Machs have, the more they excel. In contrast to focusing on one specific aspect of the work environment, our approach to explaining the relationship between Machiavellianism and contextual performance draws on the broader notion that Machiavellian employees view their entire employment relationship—and thus the scope of their job—in transactional terms, and that it is this different view that results in different patterns of behavior at work.

Second, our work contributes to the psychological contract literature, which in the past has been dominated by studies examining the outcomes of psychological contract breach (i.e., how employees respond when organizations fail to fulfill employees' psychological contracts; Morrison & Robinson, 1997; Rousseau, 2001). In contrast, we are not aware of any study that has theoretically posited and empirically explored whether certain antecedents may have relevance for only certain types of psychological contracts (i.e., in our case,

Machiavellianism and transactional types). Moreover, most studies on the ramifications of psychological contract types have explored relationships with work-related perceptions and attitudes, such as job satisfaction, work commitment, organizational commitment, and turnover intentions (e.g., Millward & Hopkins, 1998; Raja et al., 2004), but not with work performance. Indeed, we know of only one study that has linked psychological contract types with a performance domain, the one by Hui, Lee, and Rousseau (2004), which reported a significant positive relationship between transactional contracts and OCBs, mediated by instrumentality, among a large sample of Chinese employees. Yet given the topic's relevance, it is our hope that the framework advanced in this research will help scholars to expand their research efforts to other performance-related phenomena. To this end and in building on Rousseau's (2001) conception of psychological contracts as schemas and Motowidlo et al.'s (1997) theorizing about links between personality and performance, our work provides a broad theoretical foundation that has the potential to help connect psychological contract types with other phenomena of interest to organizational scholars, such as voluntary and involuntary turnover, absenteeism, reduced work effort, and customer service behaviors (e.g., Bordia, Restubog, Bordia, & Tang, 2010).

Another point that merits mention with respect to psychological contracts is the relationship between Mach and relational contracts. Although the Mach literature overall suggests that high Mach employees will form transactional contracts, one could point out, for example, that some conceptual and empirical works hint at the possibility that forming a relational contract may be desirable to such individuals under certain circumstances. For instance, a number of studies suggest that Machiavellianism is related to strategic self-disclosure (Dingler-Duhon & Brown, 1987) and ingratiation (Pandey & Rastogi, 1979)—two tactics aimed at creating the illusion of intimacy, presumably in the service of deceiving others. However, based on our reading of the literature, we conceive of such maneuvering as tactical episodes. In other words, while high Machs may sometimes seek out relational contracts as a deception tactic, it is not their usual modus operandi; and as such, we did not see a theoretical basis that would justify a hypothesis specifying relational psychological contracts as a meaningful mediator in the context of our studies.

As a final contribution, our studies add to the growing body of research examining the relationship between Machiavellianism and job performance. One aspect that warrants mention pertains to our conceptualization of job performance as comprising task performance and contextual performance in the form of OCBs and deviant behaviors. As such, our operationalizations reflect important theoretical developments in this area and stand in contrast to much prior research that has relied on proxies of job performance, such as job title and income level (Gable & Topol, 1988; Hunt & Chonko, 1984; Sparks, 1994).

#### Practical and Research Implications

Our results have practical implications for managerial practice. Foremost, managers should be wary of high Mach employees. While we cannot recommend testing for Machiavellianism in selection scenarios because of the limitations of the Mach IV and the newness of the Dahling et al. (2009) measure, it may pay dividends for managers to be able

to identify the characteristics of high Machs and perhaps attempt to engage them in situations where they will be less likely to harm the organization. Another, somewhat puzzling issue concerns the fact that high Machs have the potential to-and sometimes do-achieve highlevel positions in organizations because they tend to be more motivated to lead (Mael, Waldman, & Mulqueen, 2001) and more charismatic (Deluga, 2001) than low Machs. Indeed, it is those tendencies that initially gave rise to the question of whether high Machs are more successful in the workplace. On the other hand, certain characteristics of high Machs make it seem that such success will not be shared with others. When one considers these two contradictory aspects—that high Mach employees have what it takes to "get to the top" in today's organizations but are also likely to take advantage of their position as or when they get there (e.g., Judge, Piccolo, & Kosalka, 2009)—one wonders which contextual conditions (e.g., organizational type, occupation, industry) facilitate and/or hinder the career success of high Machs.

## *Limitations and Strengths*

Our research is not without limitations. Most notably, although we show consistent results across four studies, each of the studies is cross-sectional (with the exception of Study 2, which uses a temporal research design), and thus we cannot draw causal inferences from our data. For instance, although performance is usually conceptualized as an outcome of personality, it could be possible that employees with low performance ratings behave in a more Machiavellian manner. Second, we had employees evaluate their own levels of Machiavellianism. Future research might be better served by drawing on other raters' evaluations of employee personality, as some employees may have responded in a socially desirable manner and thus understated the extent to which they are Machiavellian. Future research employing a wider array of personality measures, different performance measures, longitudinal research designs, and others' ratings of personality will help to provide greater explanatory power of the effects of personality and psychological contracts on job performance. Third, we considered only psychological contract types as characteristic adaptations linking Machiavellianism and performance, while other variables could potentially play a similar role. For instance, Machiavellianism could affect contextual performance through job satisfaction. Mach is negatively related to job satisfaction (Dahling et al., 2009; Hunt & Chonko, 1984), and job satisfaction is negatively related to OCBs and deviance. It is also plausible that Mach is negatively related to endorsement of the positive reciprocity norm, a precursor to OCBs (Organ, 1988), and positively related to negative reciprocity norm endorsement, an antecedent of deviance (e.g., Bennett & Robinson, 2003). Future research addressing alternative characteristic adaptations could provide new insights into the relationship between Machiavellianism and performance. Finally, we were unable to examine our hypothesized predictions through a single structural model given the large number of parameters to be estimated (Kim, 2005; Williams, Vandenberg, & Edwards, 2009).

Despite these limitations, our research has several strengths. First, the use of others' ratings of job performance behaviors (in Studies 1-4) and psychological contract types (in Study 4) addresses some concerns related to common method variance and likely yielded more reliable results than having used self-reports alone. Another methodological strength is that we were able to corroborate the mediation effects of psychological contract type across four studies among four different groups of employees, thereby strengthening the generalizability of our findings. Finally, by using a different OCB measure in Study 3, using a different task performance measure in Study 2, using two different versions of the Mach IV scale (Christie & Geis, 1970; Valentine & Fleischman, 2003) in Studies 1 and 2, and using the new Machiavellianism measure by Dahling et al. (2009) in Studies 3 and 4, we established constructive replication (Lykken, 1968). Constructive replication purportedly strengthens the validity of study results and, as a more conservative test, provides greater confidence in our study results (cf. Lykken, 1968).

### Conclusion

In this research, we sought to contribute to the long-standing debate regarding the relationship between Machiavellianism and job performance. To do this, we have drawn on the theorizing of Motowidlo et al. (1997) to argue that it is beneficial (a) to specify the link between Machiavellianism and the performance criterion such that the focus is on contextual instead of task performance and (b) to model the underlying mechanism that links Machiavellianism and contextual performance, for which we posited and tested a work-related schema in the form of an employee's preferred psychological contract type. Our results, obtained across four studies in which data were collected from multiple samples and sources, indicate that Machiavellian employees tend to form transactional psychological contracts and, as a result, engage in lower levels of citizenship behavior and higher levels of organizational deviance. Finally, Machiavellianism was not found to be significantly associated with task performance.

#### References

Aquino, K., Lewis, M. U., & Bradfield, M. 1999. Justice constructs, negative affectivity, and employee deviance: A proposed model and empirical test. *Journal of Organizational Behavior*, 20: 1073-1091.

Baron, R. M., & Kenny, D. A. 1986. The moderator-mediator distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51: 1173-1182.

Bennett, R. J., & Robinson, S. L. 2003. The past, present, and future of workplace deviance research. In J. Greenberg (Ed.), *Organizational behavior: The state of the science* (2nd ed.): 247-281. Mahwah, NJ: Lawrence Erlbaum.

Bergman, M. E., Donovan, M. A., Drasgow, F., Overton, R. C., & Henning, J. B. 2008. Test of Motowidlo et al.'s (1997) theory of individual Differences in task and contextual performance. *Human Performance*, 21: 227-253.

Berry, C. M., Ones, D. S., & Sackett, P. R. 2007. Interpersonal deviance, organizational deviance, and their common correlates: A review and meta-analysis. *Journal of Applied Psychology*, 92: 410-424.

Blau, P. M. 1964. Exchange and power in social life. New York: John Wiley.

Bordia, P., Restubog, S. L. D., Bordia, S., & Tang, R. L. 2010. Breach begets breach: Trickle-down effects of psychological contract breach on customer service. *Journal of Management*, 36: 1578-1607.

Bordia, P., Restubog, S. L. D., & Tang, R. L. 2008. When employees strike back: Investigating mediating mechanisms between psychological contract breach and workplace deviance. *Journal of Applied Psychology*, 93: 1104-1117.

Christie, R., & Geis, F. L. 1970. Studies in Machiavellianism. New York: Academic Press.

- Corzine, J. B. 1997. Machiavellianism and management: A review of single-nation studies exclusive of the USA and cross national studies. Psychological Reports, 80: 291-304.
- Dahling, J. J., Whitaker, B. G., & Levy, P. E. 2009. The development and validation of a new Machiavellianism scale. Journal of Management, 35: 219-257.
- Deluga, R. J. 2001. American presidential Machiavellianism: Implications for charismatic leadership and rated performance. Leadership Quarterly, 12: 339-363.
- Dingler-Duhon, M., & Brown, B. B. 1987. Self-disclosure as an influence strategy: Effects of Machiavellianism, androgyny, and sex. Sex Roles, 16: 109-123.
- Dudley, N. M., Orvis, K. A., Lebiecki, J. E., & Cortina, J. M. 2006. A meta-analytic investigation of conscientiousness in the prediction of job performance: Examining the intercorrelations and the incremental validity of narrow traits. Journal of Applied Psychology, 91: 40-57.
- Fehr, B., Samsom, D., & Paulhus, D. L. 1992. The construct of Machiavellianism: Twenty years later. In C. D. Spielberger & J. M. Butcher (Eds.), Advances in personality assessment (Vol. 9): 77-116. Hillsdale, NJ: Lawrence Erlbaum.
- Gable, M., & Topol, M. T. 1988. Machiavellianism and the department store executive. Journal of Retailing, 64: 68-84.
- Gable, M., & Topol, M. T. 1991. Machiavellian managers: Do they perform better. Journal of Business and Psychology, 5: 355-365.
- Geis, F. L. 1978. Machiavellianism. In H. London & J. Exner (Eds.), Dimensions of personality: 305-363. New York: John Wiley.
- Gemmill, G. R., & Heisler, W. J. 1972. Machiavellianism as a factor in managerial job strain, job satisfaction, and upward mobility. Academy of Management Journal, 15: 51-62.
- Gouldner, A. W. 1960. The norm of reciprocity: A preliminary statement. American Sociological Review, 25: 161-178. Gunnthorsdottir, A., McCabe, K., & Smith, V. 2002. Using the Machiavellianism instrument to predict trustworthiness in a bargaining game. Journal of Economic Psychology, 23: 49-66.
- Harrell, W. A., & Hartnagel, T. 1976. The impact of Machiavellianism and the trustfulness of the victim on laboratory theft. Sociometry, 39: 157-165.
- Hindle, T. (2008). Guide to management ideas and gurus. London: Profile.
- Hui, C., Lee, C., & Rousseau, D. M. 2004. Psychological contract breach and organizational citizenship behavior in China: Investigating generalizability and instrumentality. Journal of Applied Psychology, 89: 311-321.
- Hunt, S. D., & Chonko, L. B. 1984. Marketing and Machiavellianism. Journal of Marketing, 48: 30-42.
- Judge, T. A., Piccolo, R. F., & Kosalka, T. 2009. The bright and dark side of leader traits: A review and theoretical extension of the leader-trait paradigm. Leadership Quarterly, 20: 855-875.
- Kim, K. H. 2005. The relation among fit indexes, power, and sample size in structural equation modeling. Structural Equation Modeling, 12: 368-390.
- Kraimer, M. L., Wayne, S. J., Liden, R. C., & Sparrowe, R. T. 2005. The role of job security in understanding the relationship between employees' perceptions of temporary workers and employees' performance. Journal of Applied Psychology, 90: 389-398.
- Lepine, J. A., Erez, E., & Johnson, D. E. 2002. The nature and dimensionality of organizational citizenship behavior: A critical review and meta-analysis. Journal of Applied Psychology, 87: 52-65.
- Lykken, D. 1968. Statistical significance in psychological research. Psychological Bulletin, 70: 151-159.
- Machiavelli, N. 1981. The prince. New York: Bantam Books. (Original work published 1513)
- Mael, F. A., Waldman, D. A., & Mulqueen, C. 2001. From scientific careers to organizational leadership: Predictors of desire to enter management on the part of technical personnel. Journal of Vocational Behavior, 59: 132-158.
- McHoskey, J. W. 1995. Narcissism and Machiavellianism. Psychological Reports, 77: 755-759.
- McHoskey, J. W. 1999. Machiavellianism, intrinsic versus extrinsic goals, and social interests: A self-determination theory analysis. Motivation and Emotions, 23: 267-283.
- Meyer, H. D. 1992. Norms and self-interest in ultimatum bargaining: The prince's prudence. Journal of Economic Psychology, 13: 215-232.
- Millward, L. J., & Hopkins, L. J. 1998. Organizational commitment and the psychological contract. Journal of Social and Applied Psychology, 28: 16-31.
- Morrison, E. W., & Robinson, S. L. 1997. When employees feel betrayed: A model of how psychological contract violation develops. Academy of Management Review, 22: 226-256.

- Motowidlo, S. J., Borman, W. C., & Schmit, M. J. 1997. A theory of individual differences in task and contextual performance. Human Performance, 10: 71-83.
- Mudrack, P. E. 1990. Machiavellianism and locus of control: A meta-analytic review. *Journal of Social Psychology*, 130: 125-126.
- Ones, D. S., Dilcher, S., Viswesvaran, C., & Judge, T. A. 2007. In support of personality assessment in organizational settings. *Personnel Psychology*, 60: 995-1027.
- Organ, D. W. 1988. Organizational citizenship behavior: The good soldier syndrome. Lexington, MA: Lexington Books.
- 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.
- Pandey, J., & Rastogi, R. 1979. Machiavellianism and ingratiation. Journal of Social Psychology, 108: 221-251.
- Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., & Fetter, R. 1990. Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. *Leadership Quarterly*, 1: 107-142.
- Preacher, K. J., & Hayes, A. F. 2008. Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40: 879-891.
- Raja, U., Johns, G., & Ntalianis, F. 2004. The impact of personality on psychological contracts. Academy of Management Journal, 47: 350-367.
- Restubog, S. L. D., Bordia, P., & Tang, R. L. 2006. Effects of psychological contract breach on performance of IT employees: The mediating role of affective commitment. *Journal of Occupational and Organizational Psychology*, 79: 299-306.
- Robinson, S. L., & Bennett, R. J. 1995. A typology of deviant workplace behaviors: A multidimensional scaling study. Academy of Management Journal, 38: 555-572.
- Rousseau, D. M. 2001. Schema, promises, and mutuality: The psychology of the psychological contract. *Journal of Organisational and Occupational Psychology*, 24: 511-541.
- Sakalaki, M., Richardson, C., & Thepaut, Y. 2007. Machiavellianism and economic opportunism. *Journal of Applied Social Psychology*, 37: 1181-1190.
- Schulz, C. J. 1993. Situational and dispositional predictors of performance: A test of the hypothesized Machiavellianism × structure interaction among sales persons. *Journal of Applied Social Psychology*, 23: 478-498.
- Sparks, J. R. 1994. Machiavellianism and personal success in marketing: The moderating role of latitude for improvisation. *Journal of the Academy of Marketing Science*, 22: 393-400.
- Steininger, M., & Eisenberg, E. 1976. On different relationships between dogmatism and Machiavellianism among male and female college students. *Psychological Reports*, 38: 779-782.
- Topol, M. T., & Gable, M. 1990. Machiavellianism and the department store executive. *International Review of Retail, Distribution, and Consumer Research*, 1: 71-86.
- Turner, C. F., & Martinez, D. C. 1977. Socioeconomic achievement and the Machiavellian personality. Sociometry, 40: 325-336.
- Valentine, S., & Fleischman, G. 2003. The impact of self-esteem, Machiavellianism, and social capital on attorneys' traditional gender outlook. *Journal of Business Ethics*, 43: 323-335.
- 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* (Vol. 1): 1-47. Greenwich, CT: JAI.
- Williams, L. J., & Anderson, S. E. 1991. Job satisfaction and organizational commitment as predictors of organizational citizenship behaviors and in-role behaviors. *Journal of Management*, 17: 601-617.
- Williams, L. J., Vandenberg, R. J., & Edwards, J. R. 2009. Structural equation modeling in management research: A guide for improved analysis. *Academy of Management Annals*, 3: 543-604.
- Wilson, D. S., Near, D., & Miller, R. R. 1996. Machiavellianism: A synthesis of the evolutionary and psychological literatures. *Psychological Bulletin*, 119: 285-299.
- Zook, A., & Sipps, G. J. 1987. Machiavellianism and dominance: Are therapists in training manipulative? Psychotherapy: Theory, Research, Practice, Training, 24: 15-19.