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Can Job Stressors Activate Amoral Manipulation? A Weekly Diary Study

Gloria Xiaocheng Ma¹ · Paraskevas Petrou¹ · Arnold B. Bakker^{1,2} · Marise Ph. Born^{1,3}

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Abstract

This study investigates whether job stressors such as role ambiguity, procedural unfairness, and perceived competition may prompt high Machiavellian employees to use amoral manipulation at work. We also examine whether these manipulative behaviors are consequently related to their own task performance and affiliative citizenship behaviors. A weekly diary study was conducted among 111 Dutch employees over five consecutive working weeks, resulting in 446 assessed occasions. Using a multilevel moderated mediation model, we found that the relationship between weekly job stressors and weekly amoral manipulation (AM) was contingent on trait AM, when the job stressor was role ambiguity (but not when the job stressor was either weekly procedural unfairness or weekly perceived competition). Our results also revealed significant indirect effects of weekly role ambiguity on weekly task performance and weekly display of courtesy through state AM, when trait AM was high. Our findings suggest that role ambiguity activates high Machiavellian employees' manipulative behaviors at work, which in turn leads to impaired task performance and less courtesy toward others during the same working week.

Keywords Machiavellianism · Amoral manipulation · Job stressors · Work performance · Diary study

Introduction

Machiavellianism, as one of the notable dark triad traits (the other two being narcissism and psychopathy), is defined as the propensity to use manipulation as a necessary means, in order to achieve one's own personal gains in the workplace (Kessler et al., 2010). The core feature of Machiavellianism is amoral manipulation, which refers to "a willingness to disregard standards of morality and see value in behaviors that benefit the self at the expense of others" (Dahling et al., 2009, p. 10). Yet, people scoring high on Machiavellianism do not display exploitative and manipulative behaviors all the time. Rather, they are skilled at inferring from situational cues and exert manipulation toward others only when doing

so will benefit themselves (Bereczkei, 2018; Carre & Jones, 2017). This environmental sensitivity feature of Machiavellianism is essential as it helps to distinguish Machiavellianism from other dark triad traits (Jones & Mueller, 2021) and calls more attention to work situations under which high Machiavellian people tend to express their manipulative tendencies toward others (Christie & Geis, 1970; Jones & Mueller, 2021).

Researchers have endeavored to study Machiavellianism from a person-situation interactionist perspective more than 50 years ago (Christie & Geis, 1970), and have identified several contextual factors that may elicit high Machiavellian employees' detrimental behaviors in organizations. The focus in this research has clearly been on organization-level antecedents of high Machiavellian employees' harmful behaviors, including situations with loose structures (Shultz, 1993; Sparks, 1994), unethical climate (De Hoogh et al., 2021), political climate (Djurdjevic et al., 2019), organizational bottom-line mentality (i.e., organizations' strong focus on rewards and incentives; Eissa et al., 2019), organizational change (Belschak et al., 2020; Thoroughgood et al., 2021), and lack of organizational resources (Castille et al., 2017). In addition, abusive leadership (Greenbaum et al., 2016) has



[☐] Gloria Xiaocheng Ma ma@essb.eur.nl

Department of Psychology, Education and Child Studies, Erasmus University, P. O. Box 1738, Rotterdam 3000 DR, The Netherlands

Industrial Psychology and People Management Department, University of Johannesburg, Johannesburg, South Africa

Optentia and Faculty of Economic and Management Sciences, North-West University, Mahikeng, South Africa

been identified as a possible antecedent of harmful behavior by high Machiavellian people at the team level.

As can be seen from these examples, previous research has covered a wide range of contextual factors in Machiavellianism research, with a focus on organizational-level factors, but less attention to team-level or task-level situational cues. The aforementioned organizational-level factors share an ends-justify-the-means organizational orientation (De Hoogh et al., 2021). In such organizations, employees are likely to experience a lot of job stressors simultaneously, such as unclear rules about their jobs, unfair treatment from their organization, and overly competitive relationships with colleagues (De Hoogh et al., 2021; Djurdjevic et al., 2019; Eissa et al., 2019). Thus, in the present study, we focus on three job stressors (i.e., role ambiguity, procedural unfairness, and perceived competition) that are task or team-level situational cues embedded in an ends-justify-the-means organizational culture. We aim to investigate which of the job stressors may induce high Machiavellian employees to exert amoral manipulation at work.

The first proposition of this study is that we aim to investigate whether high Machiavellian employees will react to these certain job stressors with manipulative behaviors. The socio-cognitive model of job stress (Lazarus & Folkman, 1984) suggests that individual differences may influence how people perceive and cope with stressful events. People high in Machiavellianism are highly self-interested and are willing to engage in amoral manipulation to secure their own gains (Dahling et al., 2009). When they encounter job stressors at work, high Machiavellian employees may perceive the aforementioned stressors as either opportunities, threats, or a combination of both toward their ultimate goals, which evokes their corresponding manipulative behaviors to protect or achieve their own gains.

The next proposition that we aim to investigate is whether high Machiavellian employees' enacted manipulative behaviors may, in turn, harm their own task and contextual performance. Social exchange theory emphasizes the importance of relationship maintenance through mutual trust, reciprocity, and cooperation between individuals (Blau, 1964; Cropanzano & Mitchell, 2005). Although high Machiavellian employees may put on their masks and be nice to others at times (Blickle et al., 2020), their enacted amoral manipulation may still instantly break the social exchange balance with other people during work, leading to impaired work performance (O'Boyle et al., 2012).

To address our research aims, we apply a weekly diary study design and distinguish trait and state amoral manipulation (AM). Trait AM reflects people's general tendency to abandon moral standards and engage in amoral manipulation, whereas state AM reflects within-person behavioral fluctuations in amoral manipulation during short time periods (Dahling et al., 2009; Fleeson & Jayawickreme, 2015).

Importantly, people scoring high on Machiavellianism may only show their manipulative behaviors in certain situations (Bereczkei, 2018), which implies that the within-person fluctuations in amoral manipulation should be taken into account in Machiavellianism research. The weekly diary design and the corresponding multilevel analytical approach form an optimal way to distinguish the within-person behavioral fluctuations of state AM from between-person individual differences of trait AM. This methodology enables us to investigate whether high Machiavellian employees respond to certain job stressors with manipulative behaviors, and to test the potential impact on their own work performance simultaneously. We use trait AM as moderator instead of the overarching construct of Machiavellianism in order to make sure that the interactions between job stressors and the specific individual trait AM could eventually lead to the corresponding within-person state level of AM (Fleeson & Jayawickreme, 2015).

We aim to contribute to personality, business ethics and organizational research in three ways. First, the current study disentangles the between-person (trait) and within-person (state) components of amoral manipulation, and attempts to examine the circumstances under which state AM is likely to be elicited. In doing so, this study contributes to the current research on personality dynamics, which stresses the importance of using a process-based approach to study behaviors and feelings within individuals (Rauthmann et al., 2019). Second, integrating the concepts of trait versus state AM within the socio-cognitive model of job stress (Lazarus & Folkman, 1984), the current research may advance our understanding of Machiavellianism from a person-situation perspective (Jones & Mueller, 2021) and broaden our knowledge of the potential individual and situational drivers of unethical behaviors in organizations (Kish-Gephart et al., 2010). Third, the current study attempts to reveal the potential work-related outcomes (i.e., task performance and contextual performance) when high Machiavellian employees exert amoral manipulation at work.

Theoretical Background

Job Stressors, Trait and State Amoral Manipulation (AM)

The socio-cognitive model of job stress (Lazarus & Folkman, 1984) emphasizes the importance of people–environment interactions, such that individuals differ in terms of their perceptions and appraisals of job stressors, leading to different behavioral reactions. Based on this theory, we suggest that particularly the interplay of trait AM and job stressors could evoke the state AM of people scoring high on trait AM at work, which may in turn impair their task



performance and contextual performance. We propose three job stressors, namely role ambiguity, procedural unfairness, and perceived competition. These stressors all are important job stressors embedded in organizations that emphasize ends-justify-the-means, which may serve to be potential situational clues at the task or team level that elicit high Machiavellian employees' manipulative behaviors at work.

Role Ambiguity

Role ambiguity refers to an uncertainty about the expectations of one's job aspects (Pettijohn et al., 2014). When there is high role ambiguity at work, employees are not clearly informed about what should be done and what should not be done in their jobs. People high in Machiavellianism are sensitive to opportunities that enable them to exploit others and gain profits (Bereczkei, 2018; Carre & Jones, 2017). Thus, the unclear boundaries of one's job roles may provide high Machiavellian employees a "wiggle room" (Sparks, 1994) to exert manipulation to achieve their own benefits. Furthermore, the ambiguity in job roles also provides an opportunity for high Machiavellian employees to achieve self-interests instead of fulfilling their job duties and achieving organizational goals (O'Boyle et al., 2012). In support of this idea, previous research has found that people high in Machiavellianism tended to manipulate more and win more in situations where latitude for improvisation was offered (Christie & Geis, 1970). Similarly, previous research has shown that in loosely structured situations (i.e., high levels of autonomy and uncertainty, and low levels of control and supervision), high Machiavellian employees tended to achieve high sales performance (Shultz, 1993) and to accept unethical IT practices at work (Winter et al., 2004). Furthermore, high Machiavellian leaders working in a low rule climate were more likely to show an abusive leadership style toward their subordinates (De Hoogh et al., 2021).

Procedural Unfairness

Procedural unfairness includes two sub-dimensions, namely, social procedural unfairness and structural procedural unfairness (De Boer et al., 2002). Social procedural unfairness concerns the degree to which superiors' interpersonal treatment toward subordinates are perceived as unfair, whereas structural procedural unfairness concerns the degree to which superiors' actions during decision-making procedures toward subordinates are perceived as unfair (Colquitt et al., 2006; De Boer et al., 2002). Unfair treatment by supervisors is regarded as a need-threatening situation for employees (Michel & Hargis, 2016). When people perceive the environment as unfair, untrustworthy, and hostile, they may react with more opportunism (Brown et al., 2021; Sakalaki et al., 2009). Especially for high Machiavellian employees who

are highly self-interested, superiors' procedural unfairness will threaten their purposes of pursuing success. To ensure their own benefits at work, high Machiavellian employees may therefore exert more manipulative strategies toward others to deal with this stressor. In fact, Spector (2010) proposed that certain personality traits (e.g., hostile attribution bias, narcissism) may induce employees' deviant behaviors in provocative situations. This notion has been supported by empirical findings. For instance, Hussain et al. (2021) have found that in an organizational culture where inequity and corruption were tolerated, high Machiavellian people were more likely to engage in unethical behaviors. Michel and Hargis (2016) also found that procedural unfairness prompted employees' deviant behaviors through intrinsic motivation. This indirect effect was stronger for employees with a high level of dispositional aggression.

Perceived Competition

Perceived competition refers to employees' perceptions of whether organizational rewards depend on a comparison of their own work performance against their peers (Brown et al., 1998). People scoring high on Machiavellianism are competitive in nature and own a competitive conflict resolution mindset (Mesko et al., 2014). Such competition as perceived by high Machiavellian employees as both opportunity and threat to their success at work. Highly competitive organizations emphasize production and goal attainment while neglecting ethical rules (Eissa et al., 2019), which may drive high Machiavellian employees to seize opportunities to facilitate their work. Furthermore, employees are always under high pressure when working in a competitive environment (Serenko & Choo, 2020). Competition implies limited job resources and the allocation of job resources may then depend on employees' performance (Marino & Zaboinik, 2004), which will drive high Machiavellian employees to exert amoral manipulation to ensure their success. In fact, Kuyumcu and Dahling (2013) found that insufficient resources at work prompted high Machiavellian employees to use illegitimate manners (e.g., undermining other people's efforts) to get ahead. High competition may also threaten people high in Machiavellianism own rewards, which may drive them to exert more manipulation to survive and compete with their coworkers, in order to succeed. In a competitive working environment, high Machiavellian employees tend to exert power over others (House, 1988) or display high ability instead of weakness to achieve their goals (Shepperd & Socherman, 1997).

In sum, we propose that the aforementioned three job stressors (role ambiguity, procedural unfairness, and perceived competition) will induce high Machiavellian employees to use amoral manipulation in the workplace, and we therefore formulate the following three hypotheses,



respectively. Note that we do not form any hypotheses about the main effects of job stressors on state AM in the current study, as we believe that the presence of both trait AM and job stressors is essential to trigger state AM. In other words, the within-person enactment of state AM would not happen if either of them was missing. This aligns with the fundamental person-situation interactionist perspective that the interaction of personal characteristics and situational cues is the key for triggering certain behaviors of individuals (Endler & Magnusson, 1976; Ten Berge & De Raad, 2001).

Hypothesis 1a Trait AM moderates the relationship between weekly role ambiguity and weekly state AM, such that the relationship is stronger for employees high (vs. low) on trait AM.

Hypothesis 1b Trait AM moderates the relationship between weekly procedural unfairness and weekly state AM, such that the relationship is stronger for employees high (vs. low) on trait AM.

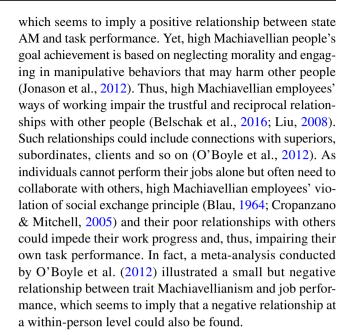
Hypothesis 1c Trait AM moderates the relationship between weekly perceived competition and weekly state AM, such that the relationship is stronger for employees high (vs. low) on trait AM.

Work Performance and State Amoral Manipulation (AM)

High Machiavellian employees' amoral manipulation toward others violate the social exchange principle that emphasizes the equilibrium of reliable and sustainable exchanges between individuals (Blau, 1964; Cropanzano & Mitchell, 2005). The violation of social exchange relationships with colleagues may impair high Machiavellian employees' work performance, as people in organizations rely on interpersonal collaborations to fulfill job duties (O'Boyle et al., 2012). Thus, we propose that when high Machiavellian employees exert manipulative behaviors (state AM) toward others in the workplace, these behaviors do not only hurt other people, but may also influence high Machiavellian employees' own task and contextual performance. Accordingly, we include weekly task performance and weekly affiliative citizenship behaviors to examine whether the enacted manipulative behaviors (state AM) are related to high Machiavellian employees' own task and contextual performance during the working week.

Task Performance

People high in Machiavellianism are apt to use various tactics to manipulate other people in order to fulfill their own goals (e.g., social status and money; Jones & Paulhus, 2009),



Affiliative Citizenship Behaviors

Affiliative citizenship behaviors refer to employees' actions that help to maintain the work processes and work relationships with others (Grant & Mayer, 2009). These behaviors include helping others to solve their problems, showing courtesy toward others, and trying to prevent interpersonal problems (Van Dyne et al., 1995). People scoring high on Machiavellianism are usually self-interested and are only concerned with their own benefits (Wu & Lebreton, 2011). When high Machiavellian employees engage in amoral manipulation at work, they focus on their own goals by all means (Christie & Geis, 1970; Dahling et al., 2009). Furthermore, people high in Machiavellianism possess a transactional view on their psychological contract, that is, a shortterm and economic view (Zagenczyk et al., 2011). When such a transactional psychological contract is breached, they will become more disidentified with the organization (Zagenczyk et al., 2013) and display more deviant behaviors (Zagenczyk et al., 2011). Thus, they would neither be concerned if their behaviors will bring any trouble to others, nor lend a hand when others need help. Hence, we expect that the more manipulative behaviors they show at work, the fewer affiliative citizenship behaviors they will display during the same working week.

In sum, we expect that high Machiavellian employees' enacted amoral manipulation, which are operationalized as state AM, may lower their own task performance, reduce their affiliative citizenship behaviors during the working week. Hence, we formulate the following three hypotheses:

Hypothesis 2a Weekly state AM is negatively related to weekly task performance.



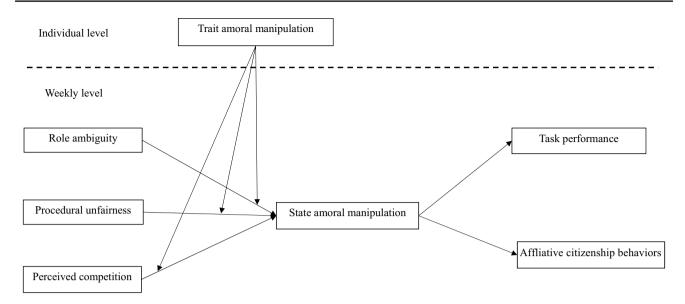


Fig. 1 Hypothesized model

Hypothesis 2b Weekly state AM is negatively related to weekly affiliative citizenship behaviors.

Taken together, hypotheses 1 and 2 imply that role ambiguity, procedural unfairness, and perceived competition indirectly relate to task performance, affiliative citizenship behaviors through state AM on the weekly level, when trait AM is high (vs. low). Therefore, we will also test an overall, cross-level moderated mediation model, in which state AM serves as the mediator, and trait AM serves as the moderator (see Fig. 1 for the hypothesized model).

Hypothesis 3 Weekly role ambiguity, weekly procedural unfairness, and weekly perceived competition are indirectly related to weekly task performance, weekly affiliative citizenship behaviors through weekly state AM, when trait AM is high (vs. low).

Methods

Participants and Procedure

We conducted a five-week diary study to address our research aims. As participants were required to fill out a weekly survey over five weeks, this enabled us to capture the within-person variations of participants' perceptions of job stressors, state AM, and work performance over the weeks (Ybema et al., 2020). Furthermore, combined with a multilevel moderated mediation model, this research design helped us to distinguish between within-person variations and between-person differences of amoral manipulation and

to examine the links between high Machiavellian employees' job stressors, state AM, and work performance at a within-person level. The reason to apply a weekly diary design instead of a daily diary design is that the existing literature has shown that the mean scores of workplace deviance (e.g., counterproductive work behavior) are usually below 2 on a frequency scale ranging from 1 (never) to 5 (every day), which indicates that these deviant behaviors do not occur every day for every employee (see Meurs et al., 2013; Yang & Diefendorff, 2009). Thus, applying a weekly diary design to capture the within-person fluctuations of amoral manipulation at work seems a better approach.

A convenience sample was collected with the help of two research assistants among Dutch employees in 2018, using the network sampling technique (Demerouti & Rispens, 2014). According to the authors, this technique helps to increase the heterogeneity of the sample and ensures the generalizability of the findings. By means of this technique, we invited 203 Dutch employees from different Dutch organizations to participate in the study via an invitation letter. The invitation letter stated that the study was aimed to investigate how employees deal with their work situations. To be able to participate, respondents had to work at least three days a week in the next five weeks in order to fill out the weekly surveys. Participants were also informed that their information would be kept confidential and that they could quit at any time. The general survey contained questions about demographics and personality traits. We included not only trait AM items but also items for other personality traits (e.g., empathy), in order to make our focus of trait AM less apparent. During the following five weeks, participants received a weekly online survey at the end of each working



week. They had to report the extent to which they displayed several feelings and behaviors during the past week. The weekly surveys contained items about weekly level variables, namely, state AM, weekly job stressors, and weekly work performance. To ensure that participants' data were sufficient to reflect their working experiences during one week, in the beginning of the weekly surveys, we included a question asking the number of days each participant had worked during the week and we added a skip logic to this question. If participants chose the option of less than three days, they were directly linked to the end of the weekly survey for that week, and were asked to complete the survey again the next week.

As we focused on the within-person relationships in the present study, each participant needed at least two weekly diary surveys to detect their within-person fluctuations (Pekaar et al., 2018). Therefore, we only included those participants who could provide at least two weekly surveys. The final sample consists of 111 participants and 446 occasions (response rate = 54.7%). 56.8% of the participants were females and more than half of the participants had completed university-level education (56.7%). Their average age was 34.79 years (SD = 12.58) and they had 34.65 (SD = 7.99) working hours per week. 45% of the participants worked 5 days a week, whereas 37.8% worked 4 days and 13.5% worked 3 days a week. Participants came from different occupational sectors, such as education (17.1%), industry (13.5%), healthcare and welfare (12.6%), trade (8.1%), government (7.2%), business services (5.4%), and transport (4.5%). We checked the attrition bias for the 20 participants who only filled out one weekly survey. The results showed that, although they scored higher on the altruism dimension of affiliative citizenship behaviors ($M_{\text{dropouts}} = 5.33$, $M_{\text{sample}} = 4.55$, t (129) = 3.02, p = 0.007), they did not differ from the sample on any of the other study variables.

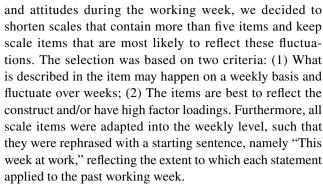
Measures

Between-Person Level Measures

Trait AM. Trait AM was measured with the five-item amoral manipulation subscale ($\alpha = 0.77$) of the Machiavellian Personality Scale (MPS; Dahling et al., 2009). One item example is "I am willing to be unethical if I believe it will help me succeed" (1 = strongly disagree to 7 = strongly agree).

Within-Person Level Measures

In diary studies, shortened scales are used in order to avoid participants' fatigue and high drop-out rates (Ohly et al., 2010). Moreover, because our study is a weekly diary study aiming to capture the fluctuations of employees' behaviors



State AM. We adapted the five-item trait AM scale (Dahling et al., 2009) into the state AM scale, which reflected the amoral manipulative behaviors participants displayed at work during the past week. The five state AM items are "I behaved unethically in order to succeed," "I sabotaged the efforts of other people when they threatened my own goals," "I cheated when there was a low chance of getting caught," "I lied to maintain a competitive advantage over others," "I talked to others only to get information that I could use to my benefit" (1 = strongly disagree to 7 = strongly agree). Cronbach's α ranged from 0.78 to 0.89 (M = 0.85) in our study.

Role ambiguity was measured with three items from Pettijohn et al. (2014). These three items are "I knew my responsibilities," "I knew exactly how I was supposed to do in my job" and "I received clear explanations of what had to be done" (reverse coded; 1 = never to 7 = always). As Cronbach's α of the three-item scale was below 0.50 and the item-total correlation for the third item was rather low, we decided to only use the first two items in this study. Spearman-Brown's split-half reliability for the two-item scale ranged between 0.70 and 0.85 (M = 0.80) across the weeks.

Procedural unfairness was measured with two three-item subscales from De Boer et al. (2002), namely, structural procedural unfairness and social procedural unfairness. An item of structural procedural unfairness is "Each employee was treated in the same way (reverse coded; 1 =never to 7 = always). Cronbach's α ranged between 0.57 and 0.73 (M=0.65) in the current study. An item of social procedural unfairness is "Did you feel that your superiors communicated in an honest and straightforward manner?" (reverse coded; 1 = never to 7 = always). Cronbach's α ranged between 0.78 and 0.86 (M = 0.83) in the current study. Although De Boer et al. (2002) reported a high (betweenperson) correlation between the two dimensions (0.75), the correlation was found to be only 0.31 at the within-person level in our study. Moreover, multilevel confirmatory factor analysis (MCFA) showed that in our sample a two-factor model fit the data significantly better than a one-factor model (Δ Satorra-Bentler Scaled $\chi^2(2) = 46.93$, p < 0.001). Therefore, we treated structural and social procedural unfairness as two separate variables.



Perceived competition was measured with a four-item scale developed by Brown et al. (1998). An item example is "Everybody was concerned with being the top performer" (1 = never to 7 = always). Cronbach's α ranged from 0.78 to 0.81 (M=0.80) in the current study.

Task performance was measured with a three-item individual task proficiency scale (Griffin et al., 2007). One item example is "I carried out the core parts of my job well" (1 = never to 7 = always). Cronbach's α ranged from 0.86 to 0.91 (M=0.89) in the current study.

Affiliative citizenship behaviors were measured with the three-item altruism and the three-item courtesy scales from Podsakoff et al. (1990). One item example for courtesy is "I took steps to try to prevent problems with other workers" (1 = never to 7 = always). Cronbach's α ranged from 0.63 to 0.81 (M = 0.75) in the current study. One item example for altruism is "I lent a helping hand to those around me" (1 = never to 7 = always). Cronbach's α ranged from 0.75 to 0.88 (M=0.82) in the current study. As suggested by Grant and Mayer (2009), the two dimensions can be combined into a single affiliative citizenship factor. Yet, our multilevel CFA analysis revealed that a two-factor model fit the data significantly better than a unidimensional model (\Delta Satorra-Bentler Scaled $\chi^2(2) = 100.16$, p < 0.001). The correlation between the two dimensions at the within-person level was only 0.10, which also supported treating the two dimensions separately.

Strategy of Analyses

The weekly diary design of our study implies a multilevel data structure, with weekly occasions on the first level (N=446 occasions) nested within individuals on the second level (N=111 respondents). Thus, we used a multilevel moderated mediation path analysis model to test our hypotheses. The data were analyzed by using TYPE=TWOLEVEL random and ESTIMATOR=BAYES in Mplus 8.4 (Muthén & Muthén, 1998–2017). The trait AM variable on betweenperson level was grand-mean centered before analyzing the data (Ohly et al., 2010). The job stressor predictors were modeled as latent variables both on the within and betweenperson levels, by not mentioning them in the WITHIN statement (Muthén & Muthén, 1998–2017, pp. 274–275).

In addition to the hypothesized paths, we tested the relationships between trait AM and the between-person components of weekly state AM, weekly task performance, weekly courtesy, and weekly altruism. We also tested the relationships between weekly job stressors and weekly work outcomes (i.e., task performance, courtesy, and altruism) in the model. Although testing these relationships was not our primary goal and we did not formulate any hypotheses about them, we included them to have a more thorough understanding of the connections between the variables in the model. We included age, gender and the latent

between-person components of job stressors as control variables in the model¹, to have a more accurate estimation of the between-person level effects (Antonakis et al., 2019; Hamaker & Muthen, 2020).

We used the online tool developed by Preacher et al. (2006) to plot and interpret the cross-level interaction model, and to compute the simple slopes and the regions of significance. For the moderated mediation, we computed Monte Carlo 95% confidence intervals with 20,000 iterations to estimate the conditional indirect effects (Bauer et al., 2006). Furthermore, we reported the standardized indirect effects (ab_{cs}) to examine the effect sizes of the indirect effects of each moderated mediation sequence (Preacher & Kelly, 2011).

Results

Descriptive Statistics

Table 1 provides the means, standard deviations, intra-class correlations (ICCs), and all correlations between level 1 and level 2 variables. The ICC of state AM was 0.63, which indicates that 37% of the variance was attributed to within-person variations. The results also showed that there were moderate but still substantial within-person variances for job stressors and work outcome variables on the weekly level (varying from 31 to 40%). These primary results indicated that a multilevel analytical approach was suitable for the current data.

Measurement Model

Multilevel CFA was conducted to examine the construct validity of all the variables in our study. We included trait AM on the between-person level and weekly role ambiguity, social and structural procedural unfairness, perceived competition, state AM, task performance, courtesy and altruism on the within-person level in the multilevel CFA model. The results of our proposed model showed a good fit to the data (χ^2 (276) = 470.23, CFI = 0.94, TLI = 0.93, SRMR within = 0.06, SRMR between = 0.03, RMSEA = 0.04). The proposed model showed a better fit compared to a one-factor model, where all the items loaded on one latent factor (Δ Satorra-Bentler Scaled χ^2 (31) = 1926.54, p < 0.001). The variance inflation factors for all the variables ranged between 1.19 and 1.98, which were below the threshold value of 5.0 (Sheather, 2009). The multilevel

¹ None of the variables showed significant differences on occupational sectors. Therefore, we did not control for occupational sectors in this study.



Table 1 Descriptive statistics and correlations among between-person and within-person variables

			,											
	M	SD	M SD ICC 1	-	2	3	4	5	9	7	∞	6	10	11
Leve 2 (between-person)														
1. Gender	0.58	0.58 0.49 -	ı	1										
2. Age	35.68	35.68 12.62 -	1	.00	ı									
3. Trait amoral manipulation	1.97	- 67. 79.	I	-0.31**	[** - 0.20** .77	77.								
Level 1 (within-person)														
4. State amoral manipulation	1.56	0.59	0.63	$1.56 \ 0.59 \ 0.63 \ -0.23**$	- 0.25** 0.64**	0.64**	(0.78/0.89) 0.11*	0.11*	0.11*	0.05	90.0	-0.20**	-0.17**	-0.13**
5. Role ambiguity	2.03	0.82	0.69	2.03 0.82 0.69 - 0.13**	-0.41** 0.17**	0.17**	0.27**	(0.70/0.85) 0.11*	0.11*	0.02	0.13**	- 0.36**	0.01	- 0.10
6. Social procedural unfairness	2.86	2.86 1.09		.57 - 0.11*	0.18**	0.29	0.31**	0.12*	(0.78/0.86) 0.31**	0.31**	0.11*	- 0.20**	0.01	- 0.17
7. Structural procedural unfair-	3.14	0.95	3.14 0.95 0.61 0.03	0.03	0.01	0.21**	0.33**	0.16**	0.75**	(0.57/0.73)	0.13**	-0.10*	- 0.01	-0.15**
ness														
8. Perceived competition	2.72	1.04	2.72 1.04 0.69 0.01	0.01	-0.36**	-0.36** 0.22**	0.32**	0.36**	0.28**	0.13**	(0.78/0.81) - 0.04	- 0.04	0.14**	-0.02
9. Task performance	5.82	5.82 0.80	99.0	0.66 0.13**	0.32**	-0.14**	-0.25**	- 0.78**	-0.20**	-0.10*	-0.30**	(0.86/0.91) 0.13**	0.13**	0.22**
10. Courtesy	4.03	4.03 1.12	09.0	0.60 0.15**	-0.23** (0.03	0.24**	0.20**	0.03	- 00.01	0.36**	- 0.23**	(0.63/0.81)	0.10*
11. Altruism	4.47	1.03	4.47 1.03 .64	0.00	-0.11*	60.0	0.14**	- 0.02	-0.15**	-0.15**	0.16**	- 0.02	0.45**	(0.75/0.88)

Note The ranges of Cronbach's alpha reliabilities across the five weeks are in parentheses on the diagonal. Correlations at the within-person level are displayed above the diagonal (N=446 occasions) using person-mean centered, whereas correlations at the between-person level aggregated across five weeks are displayed below the diagonal (N=111 persons). All variables were responded on a seven-point Likert scale (1=strongly disagree/never, 7=strongly agree/always)

p < 0.05, **p < 0.01



Table 2 Results of multilevel moderated mediation model

	Cross-level moderated mediation model							
	State AM		Task perform	nance	Courtesy		Altruism	
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE
Level 1 variables			,					
Intercept	1.094**	0.292	7.529**	0.372	3.273**	0.752	4.829**	0.701
Role ambiguity	0.041	0.061	- 0.336**	0.055	0.019	0.087	-0.105	0.074
Social procedural unfairness	0.048	0.035	- 0.084**	0.036	0.016	0.055	- 0.107*	0.047
Structural procedural unfairness	0.000	0.053	-0.035	0.042	-0.032	0.065	-0.100	0.059
Perceived competition	0.028	0.036	0.028	0.043	0.194**	0.069	0.027	0.060
State amoral manipulation (AM)			- 0.191**	0.067	- 0.345**	0.105	- 0.168*	0.092
Level 2 variable								
Gender	-0.102	0.089	0.027	0.113	0.271	0.209	0.008	0.227
Age	-0.003	0.004	0.002	0.005	-0.011	0.011	-0.003	0.010
Role ambiguity	0.071	0.069	- 0.755**	0.089	0.082	0.171	-0.183	0.166
Social procedural unfairness	-0.056	0.073	-0.061	0.098	-0.025	0.174	-0.336	0.182
Structural procedural unfairness	0.207**	0.078	-0.035	0.111	- 0.013	0.199	0.194	0.211
Perceived competition	0.014	0.055	0.009	0.077	0.371**	0.157	0.203	0.151
Trait amoral manipulation (AM)	0.468**	0.164	0.037	0.076	-0.058	0.156	0.150	0.159
Cross-level interactions								
Trait AM * Role ambiguity	0.214**	0.077						
Trait AM * Social procedural unfairness	-0.016	0.042						
Trait AM * Structural procedural unfairness	0.024	0.059						
Trait AM * Perceived competition	0.043	0.055						
Variance Components								
Within-person variance (σ^2)	0.129**	0.012	0.253**	0.020	0.682**	0.053	0.499**	0.040
Between-person variance (τ_{00})	0.169**	0.039	0.229**	0.053	1.107**	0.198	1.048**	0.194
Model deviance	7968.732							
df	109							

^{*}p < 0.025; **p < 0.005

CFA results and the variance inflation factors both indicated that common method variance was not a concern in our study. Furthermore, we compared our proposed model with an alternative model, where the items of role ambiguity, social and structural procedural unfairness, and perceived competition loaded on one single factor and all other items loaded on their own factors. The results showed that our proposed model had a better fit to the data than the alternative model (ΔSatorra-Bentler Scaled $\chi^2(13) = 357.23$, p < 0.001). We also compared our proposed model with another alternative model, where the items of task performance, courtesy and altruism loaded on a single factor and all other items loaded on their own factors. These results also showed that our proposed model had a better fit than this alternative model (Δ Satorra-Bentler Scaled $\chi^2(16) = 330.03, p < 0.001$).

Hypotheses Testing

Hypotheses 1a–1c suggested the moderating role of trait AM on the relationship between job stressors and state AM at the weekly level, such that when trait AM is high, weekly role ambiguity, weekly procedural unfairness, and weekly perceived competition are positively related to weekly state AM. Results in Table 2 show that none of the three weekly job stressors were significantly related to weekly state AM and only the cross-level interaction between trait AM and weekly *role ambiguity* was significant (γ =0.214**, SE=0.077, *one-tailed p*=0.001, 95% CI [0.075, 0.370]), but not for the interactions with other job stressors. According to the suggestions and common practice to probe interactions (Aiken et al., 1991; Cohen et al., 2014), we chose one standard deviation (SD) above and below the mean as



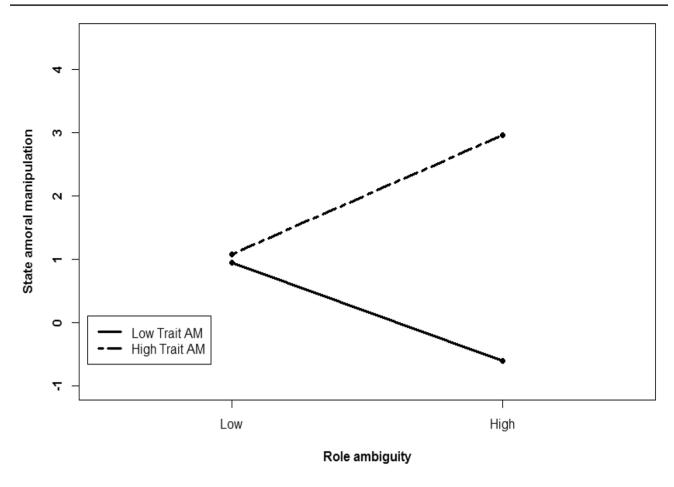


Fig. 2 Cross-level moderation effect of trait AM on the relationship between weekly role ambiguity and state AM

two conditional values to conduct simple slope analysis. The results displayed in Fig. 2 show that for people scoring low on trait AM (-1SD), the relationship between weekly role ambiguity and weekly state AM was not significant (b = -0.128, SE = 0.096, one-tailed p = 0.072, 95% CI [-0.346, 0.030]). However, for people scoring high on trait AM (+1SD), weekly role ambiguity was significantly and positively related to weekly state AM (b = 0.212**, SE = 0.078, one-tailed p = 0.002, 95% CI [0.074, 0.379]). The two simple slopes were significantly different from each other (slope difference = 0.340**, SE = 0.126, one-tailed p = 0.001, 95% CI [0.121, 0.615]). Those 22 (out of 111) participants who scored high on trait AM (+1SD) had an average age of 25.90 years. Furthermore, 63.6% of the 22 participants were male and 45.5% had received a bachelor or higher degree. They worked in different occupational sectors and had different job tasks, such as researchers, account managers, and cashiers.

Although using values of one SD above and below the mean is a common way to plot and interpret the interaction effects, this pick-a-point approach might be too arbitrary (Hayes, 2017). Therefore, we also calculated the regions of

significance on trait AM to facilitate our interpretations of the cross-level interaction effect of weekly role ambiguity and trait AM on state AM. The upper boundaries of the region of significance on the grand-mean centered trait AM (M=1.97, SD=0.79) was 0.377, which suggests that the slope of state AM on weekly role ambiguity was significant when the grand-mean centered trait AM was higher than 0.377. In sum, hypothesis 1a was supported.

In terms of hypotheses 1b and 1c, trait AM was not found to be significantly related to the random slopes of the relationships between weekly social procedural unfairness and weekly state AM ($\gamma = -0.016$, SE=0.042, onetailed p = 0.355, 95% CI [-0.101, 0.069]), weekly structural procedural unfairness and weekly state AM ($\gamma = 0.024$, SE=0.059, one-tailed p = 0.362, 95% CI [-0.088, 0.134]), as well as weekly perceived competition and weekly state AM ($\gamma = 0.043$, SE=0.055, one-tailed p = 0.217, 95% CI [-0.052, 0.162]). Thus, hypotheses 1b and 1c could not be supported in our study.

Hypotheses 2a–2c proposed that weekly state AM is negatively related to weekly task performance and weekly affiliative citizenship behaviors. Results in Table 2 confirmed



our hypotheses, showing that weekly state AM was significantly and negatively related to weekly task performance $(\gamma = -0.109^{**}, SE = 0.067, one-tailed p = 0.003, 95\%$ CI [-0.320, -0.056]), as well as significantly and negatively related to weekly courtesy $(\gamma = -0.345^{**}, SE = 0.105, one-tailed p < 0.001, 95\%$ CI [-0.559, -0.138]). Yet, weekly state AM was not found to be significantly correlated with another dimension of affiliative citizenship behaviors, namely, weekly altruism $(\gamma = -0.168, SE = 0.092, one-tailed p = 0.032, 95\%$ CI [-0.348, 0.009]). Thus, Hypothesis 2awas supported whereas hypothesis 2b was partially supported in our study.

Hypothesis 3 suggested that weekly role ambiguity, weekly procedural unfairness, and weekly perceived competition are indirectly related to weekly task performance, weekly affiliative citizenship behaviors through weekly state AM, when trait AM is high (+1SD) versus low (-1SD). Our results revealed significant indirect effects of weekly role ambiguity on weekly courtesy (Estimate = -0.070**, SE = 0.035, one-tailed p = 0.002, 95% Monte Carlo CI [-0.247, -0.050]) and weekly task performance (Estimate = -0.038**, SE = 0.022, one-tailed p = 0.005, 95% Monte Carlo CI [-0.144, -0.021]) through weekly state AM, when trait AM was high (+1SD). The indirect effect of weekly role ambiguity on weekly altruism was not significant (Estimate = -0.034, SE = 0.026, one-tailed p = 0.034, 95% Monte Carlo CI [-0.145, -0.004]), when trait AM was high (+1SD). The effect sizes (ab_{cs} : standardized indirect effect) of the indirect effects of weekly role ambiguity on weekly courtesy and weekly task performance, through weekly state AM were -0.050 (95% CI [-0.111, -0.014]) and -0.045 (95% CI [-0.108, -0.009]), respectively. Thus, hypothesis 3 was partially supported.

Although not hypothesized, in order to know more about the direct effects of trait AM on outcomes, we tested the relationships between trait AM and the between-person level of weekly state AM, weekly task performance, weekly courtesy, and weekly altruism across the five working weeks. The results revealed a significantly positive relationship between trait AM and the between-person level of weekly state AM (γ =0.468**, SE=0.157, *one-tailed p*=0.003, 95% CI [0.122, 0.756]). However, the relationships between trait AM and the between-person level of weekly courtesy (γ =-0.058, SE=0.156, *one-tailed p*=. 341, 95% CI [-0.363, 0.249]), weekly altruism (γ =0.150, SE=0.159, *one-tailed p*=0.176, 95% CI [-0.165, 0.469]), and weekly task performance (γ =0.037, SE=0.076, *one-tailed p*=.308, 95% CI [-0.115, 0.175]) were not significant.

Discussion

Grounded in a person-situation perspective, the present study investigated the antecedents and the related work outcomes of high Machiavellian employees' enacted amoral manipulation in the workplace. This was done by distinguishing within-person fluctuations and between-person individual differences of amoral manipulation. The results revealed that when people high in Machiavellianism perceived high role ambiguity during the working week, they exerted more manipulative behaviors toward others. These manipulative behaviors, in turn, led to high Machiavellian employees' poorer weekly task performance and less weekly courtesy toward others.

Theoretical Contributions

The present study makes several contributions to the literature. First, research on personality states is still limited and most studies focus on the state level of bright personality (e.g., Fleeson & Gallagher, 2009). Only a few studies have investigated the state level of dark personality so far, for example, narcissism (Giacomin & Jordan, 2014, 2016a, 2016b) and self-criticism (Zuroff et al., 2016). Therefore, in response to the call of studying personality in a dynamic approach (Rauthmann et al., 2019), the current study empirically distinguished the within-person and the betweenperson components of amoral manipulation by means of a weekly diary design. Our study showed that 63% of the variance of state AM could be attributed to between-person differences and 37% of the variance could be attributed to within-person fluctuations. This 37% within-person variation of state AM seems to be comparable to the withinperson variations of state narcissism (26–33%; Giacomin & Jordan, 2014, 2016a, 2016b) and state self-criticism (49%; Zuroff et al., 2016), which indicates that individuals' withinperson fluctuations of amoral manipulation are large enough to be paid attention to. Furthermore, the results seem to support the proposition that high Machiavellian people are not always manipulative and exploitive (Dahling et al., 2009; Jones & Mueller, 2021), which further empirically supports the necessity of investigating the circumstances under which Machiavellians exert manipulative behaviors toward others (Jones & Mueller, 2021).

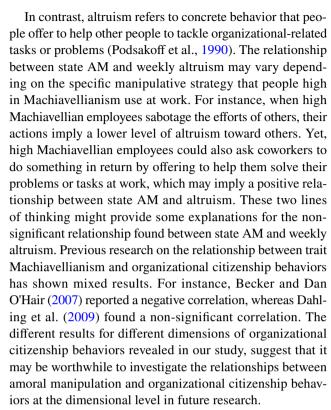
Second, the current study attempts to reveal how specific job stressors in organizations could elicit high Machiavellian employees' manipulative behaviors and provides more empirical support for studying Machiavellianism's unique feature-environmental sensitivity (Christie & Geis, 1970; Jones & Mueller, 2021). Our findings indicate that when people high in Machiavellianism have ambiguous job requirements and expectations at work, they have more "wiggle room" and are more likely to exert manipulative behaviors (e.g., cheating, lying, and sabotage) to achieve their goals. This finding is in line with previous research showing that high Machiavellian people tend to manipulate more and win more in situations with loose structures and few rules (Christie & Geis, 1970; De Hoogh et al., 2021;



Shultz, 1993; Sparks, 1994; Winter et al., 2004). Previous research has shown that various situational cues at different levels may also activate high Machiavellian employees' unethical behaviors, such as abusive leadership (Greenbaum et al., 2016) at the team level, as well as unethical climate (De Hoogh et al., 2021), organizational bottom-line mentality (Eissa et al., 2019), organizational change (Belschak et al., 2020; Thoroughgood et al., 2021), and a lack of organizational resources (Castille et al., 2017) at the organizational level. The present study specifically focuses on three task or team-level job stressors that employee may encounter frequently, namely role ambiguity, procedural unfairness, and perceived competition. Thus, our work may expand knowledge of the situational drivers of high Machiavellian employees' unethical behaviors in organizations (Kish-Gephart et al., 2010), particularly at the task or team level.

Third, the present study not only aimed to capture the antecedents of high Machiavellian employees' state AM in work settings, but also addressed its potential work-related outcomes. Our findings suggest that when confronted with role ambiguity at work, people high in Machiavellianism tend to exert more manipulative behaviors toward others, which may undermine their performance at work (including task performance and display of courtesy). High Machiavellian employees prefer to do politicking rather than focusing on fulfilling their work duties (O'Boyle et al., 2012). They hold cynical views toward the world and are willing to behave unethically to achieve what they want (Christie & Geis, 1970; Dahling et al., 2009), which might also harm their performance evaluations. A meta-analytical study has revealed a weak and negative relationship (r = -0.06)between Machiavellianism and job performance (O'Boyle et al., 2012). Our research shows that this relationship could be stronger at the within-person level ($\gamma = -0.201$ for task performance and $\gamma = -0.347$ for courtesy, respectively). Thus, our results may also provide more insight into this stream of research from a within-person dynamic perspective.

Although as we expected, state AM was strongly and negatively related to weekly courtesy (one dimension of affiliative citizenship behaviors) in a negative way, state AM was found not to be significantly related to the other dimension of affiliative citizenship behaviors, namely, weekly altruism. Courtesy refers to behavior via which people try to prevent work-related problems from happening (Podsakoff et al., 1990). Specifically, when people high in Machiavellianism exert their manipulative behaviors at work, they are busy thinking how to use these strategies to achieve goals and ensure their own benefits. Under this circumstance, they lack cognitive recourses to think about whether their behaviors may affect other people or whether their behaviors should be stopped, which leads to a strong negative relationship between state AM and weekly courtesy.



Surprisingly, procedural unfairness and perceived competition were found to not have significant cross-level interaction effects with trait AM on state AM, which seems to imply that these two types of job stressors do not enact high Machiavellian employees to express manipulative behavior in the workplace. Yet, it needs to be noticed that we adapted the trait AM scale to the weekly level state AM scale in the present study, in order to capture the personality traitstate dynamics. This practice resulted in only four specific manipulative behaviors measured as state AM, which consisted of sabotage, cheating, lying, and talking to others only to get useful information. Our findings indicate that the job stressors of procedural unfairness and perceived competition cannot trigger these specific manipulative tactics for high Machiavellian employees. Nevertheless, people high in Machiavellianism act as "social chameleons" and may use different tactics in different situations to achieve their goals (Huang & Liang, 2015). Specifically, in highly competitive work situations, employees' rewards fully depend on their own performance. In this case, high Machiavellian employees tend to use more job-focused tactics (e.g., selfpromotion) to show their strength, in order to grasp limited resources and ensure their gains (e.g., Shepperd & Socherman, 1997). In highly unfair work situations, where supervisors do not treat every employee equally, people high in Machiavellianism tend to use more supervisor-focused tactics (e.g., ingratiation) to build relations with their supervisors (Ferris et al., 1994). In this way, they make sure that they will not suffer from unfair decision-making procedures



and can even gain benefits. Thus, the roles of procedural unfairness and perceived competition in triggering high Machiavellians employees' manipulative behaviors at work still need further investigation, by including a wider range of interpersonal manipulative tactics.

Practical Implications

The present study offers several practical implications regarding how to manage high Machiavellian employees in the workplace. Our study draws attention to the role of role ambiguity in triggering high Machiavellian employees' amoral manipulation at work, which in turn impairs their work performance. To prevent high Machiavellian employees' manipulative behaviors at work, making clear task descriptions and setting specific goals for each task are of great importance. Managers could also provide consideration and timely feedback for high Machiavellian employees in order to clarify their tasks and lower their chances of using manipulation toward others (Singh, 1993).

Furthermore, setting clear ethical guidelines for preventing amoral behaviors at work may also hamper high Machiavellian employees from using such behavior. Employees should also be well informed about the potential consequences of exerting manipulative behaviors at work, especially for those people who want to use this strategy to achieve success. That is, using amoral manipulation may not necessarily help them to succeed, rather, they may suffer from impaired work performance and may be punished for doing so.

Limitations and Future Research

The present study has some limitations. First, due to the length limit of diary studies, we needed to use shortened scales for the weekly measures, which resulted in a two-item scale for role ambiguity and relatively low reliabilities for structural procedural unfairness and courtesy in some weeks. The relatively low reliabilities in some weeks in diary studies are not rare (e.g., Derks et al., 2014; Martinez-Corts et al., 2015). The reason for low reliabilities in diary studies, particularly for shortened scales, may be that each item in a diary measure represents participants' experience during only one day/week, which may lead to low occurrences of certain items and low inter-item correlations for the scale (Martinez-Corts et al., 2015). Furthermore, although we tried to select items that are most important for the construct, shortened scales may not be able to cover the full breadth of the construct, leaving some aspects of the construct untested (Derks et al., 2014). Thus, a balance between using full-item scales and keeping short diary surveys should be taken into account in future diary studies.

Second, the current work only focuses on only one major dimension of Machiavellianism, namely, amoral manipulation, to target the specific eliciting job stressors of manipulative behaviors and specific resulting work outcomes (Fleeson & Jayawickreme, 2015; Judge et al., 2013). However, it is still of importance to examine the within-person fluctuating mechanisms of other dimensions of Machiavellianism (e.g., desire for control). Investigating specific work situations which might trigger other negative aspects of Machiavellianism as well as their direct impact on high Machiavellian employees, their coworkers, and the organizations that they work for, might help us know more about how to manage Machiavellians in the workplace (i.e., prohibit their negative expressions at work while encourage them to display more positive outcomes).

Third, the present study draws on the socio-cognitive model of job stress to propose how job stressors facilitate high Machiavellian employees to use amoral manipulation at work. Yet, we assumed that different job stressors could be perceived as threats, opportunities, or a combination of both, which may cause people high in Machiavellianism to react with amoral manipulation. These potential appraisals were not directly tested in the current study, and need to be further addressed in future research. Furthermore, in order to have an overarching view of work situations that might activate the expressions of Machiavellianism at work, a more comprehensive framework of work-related situations should be developed and tested in empirical studies. For example, in the present study, we confirmed that high Machiavellian employees' own role ambiguity would trigger their manipulative behaviors. Yet, coworkers' role ambiguity could also potentially trigger high Machiavellian employees to use manipulation, which could be investigated in future research.

Fourth, as we could not separate measurements of state AM and task performance in time, the direction of the relationship between state AM and task performance might still be ambiguous. Yet, we tested the mediation sequence from job stressor to task performance through state AM when trait AM is high. The significant results support that a direction from state AM to task performance may exist, which may need further confirmation. Furthermore, it may be interesting for future research to investigate the possibility that task complexity acts as a third variable influencing both state AM and weekly task performance, and to look at possible reversed causal effects. For example, task performance in a given week may be driven by the difficulty of that week's work, which may drive high Machiavellian employees to undertake amoral manipulation to get through the work.

Last, we collected a convenience sample through the network sampling technique, which increases the heterogeneity of the participants and the generalizability of the study findings (Demerouti & Rispens, 2014). Yet, adopting this strategy may have led to relatively low mean scores on trait and



state AM of the whole sample, which may also potentially diminish the external validity to some specific populations. Thus, in future research, it would be interesting to target a special group of people (e.g., people in leadership positions), who in general score high on trait AM and are generally more willing to use manipulative strategies to achieve personal goals (Spurk et al., 2016).

Conclusions

The present study investigated the mechanism of high Machiavellian employees' enacted amoral manipulation in the workplace. Role ambiguity was identified as a key job stressor for people high in Machiavellianism to exert manipulative behaviors toward others. These activated manipulative behaviors in turn lower their task performance, and reduce their courtesy toward others during the working week.

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Author Contributions All authors contributed to the study conception and design. Material preparation, data collection, and analysis were performed by GXM. The first draft of the manuscript was written by GXM and all authors commented on previous versions of the manuscript. All authors read and approved the final manuscript.

Data Availability Data and data analysis scripts are provided at https://osf.io/6jx2e/.

Declarations

Conflict of interest No potential conflict of interest was reported by the authors.

Ethical Approval This is an online survey study conducted in 2018 which do not harm participants. Ethics approval is not required from the DPECS Ethics Review Committee.

Informed Consent Informed consent was obtained from all individual participants in the beginning of the online surveys.

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