

## RESEARCH ARTICLE



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# How and when does perceived greenwashing affect employees' job performance? Evidence from China

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**Abstract**

Despite increasing interest in the implications of greenwashing, few studies have examined the underlying mechanism and contingency of how greenwashing affects employee outcomes. In this study, we develop a mediated moderation model to analyze the impact of perceived greenwashing on employee job performance (i.e., task performance and organizational citizenship behavior). Using a questionnaire survey of 400 employees in 20 Chinese companies, the results reveal that perceived greenwashing negatively affects job performance and that the relationship is mediated by organizational cynicism. Furthermore, employees' green values strengthen the indirect negative relationship between perceived greenwashing practices and job performance through organizational cynicism. The study contributes to addressing the long-discussed problem of whether greenwashing pays vis-à-vis a human resource management perspective and micro-level approach. The findings indicate that a close cooperation between the human resources and corporate environmental responsibility management departments is required to achieve the sustainable development of businesses.

**KEYWORDS**

green values, greenwashing, job performance, organizational citizenship behavior, organizational cynicism, stakeholder engagement, sustainability

## 1 | INTRODUCTION

Scholars and the media have noted that firms may adopt a so-called “greenwashing” strategy in their stakeholder communication to improve their environmental reputation and legitimacy (Delmas & Burbano, 2011; Testa et al., 2018; Torelli et al., 2020). A greenwashing strategy overstates a firm's environmental achievements by engaging in excessive communication rather than making a substantive effort to improve its environmental performance (Bowen & Aragon-Correa, 2014; Delmas & Burbano, 2011; Kim & Lyon, 2015).

Over the past decade, scholars have taken an interest in the impact of greenwashing on organization. Empirical research on the

greenwashing–performance relationship has yielded contradictory conclusions (e.g., Testa et al., 2018; Walker & Wan, 2012), and research into its underlying mechanisms remains limited (Lyon & Montgomery, 2015). Researchers have shed light on how investors (Du, 2015), customers (Chen & Chang, 2013; Nyilasy et al., 2014; Zhang et al., 2018), business partners (Ferrón-Vilchez et al., 2021), and the media (Berrone et al., 2017) react to greenwashing. However, there is limited, if any, empirical research conducted to investigate the greenwashing–performance relationship from the perspective of internal stakeholders (i.e., employees).

It is necessary to address this research gap, given corporate environment responsibility (CER) has been proved to increasingly affect

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various aspects of employee outcomes such as organizational commitment (Dögl & Holtbrügge, 2014), job satisfaction (Pinzone et al., 2019), and workplace engagement (Hicklenton et al., 2019). Moreover, employees are more likely to identify corporate word-deed inconsistency in corporate social responsibility (CSR) and respond to greenwashing behaviors, comparing with external stakeholders (Schons & Steinmeier, 2016). In general hypocrisy research, scholars have recently found that such inconsistency indeed leads to negative employee outcomes such as emotional exhaustion, turnover (Scheidler et al., 2019), and personal socially responsible activities (Babu et al., 2020), but the impact of greenwashing on employee job performance remains under-explored.

Accordingly, the present study aims to extend the current greenwashing literature to internal stakeholders' reactions by addressing the following research questions: how perceived greenwashing affects employees' attitude toward the organization and their job performance? Perceived greenwashing is defined as an employee's perception about the organizational behaviors that mislead stakeholders by green communication (Nyilasy et al., 2014). Job performance includes both in-role and extra-role dimensions such as task performance and organizational citizenship behavior (OCB) (Rich et al., 2010; Williams & Anderson, 1991).

To address our research question, we first draw on attribution theory (Malle, 2004; Weick, 1995) and social exchange theory (Blau, 1964; Cropanzano and Mitchell, 2005). We suggest that perceived greenwashing trigger an employee's dispositional attribution process, consequently leading to a cynical employee attitude that their organization lacks integrity (Chiaburu et al., 2013; Dean Jr et al., 1998), which damages the employee-organization social exchange relationship and serves to mediate the negative effects of perceived greenwashing on job performance. Subsequently, drawing on the person-organization fit (PO fit) perspective (Hicklenton et al., 2019; Kristof, 1996), we propose that personal green values strengthen an employee's negative response to perceived greenwashing by an organization. The research data came from a survey of 244 employees from 20 companies in China.

Our study makes four key contributions to the literature. First, it contributes to the literature on the greenwashing-performance relationship by adopting a human resource management (HRM) perspective and a micro-level CSR approach, which echoes previous calls to address the underlying mechanisms that drive the negative relationship between greenwashing and financial performance (e.g., Lyon & Montgomery, 2015; Walker & Wan, 2012). Second, our study extends the literature on organizational cynicism. This is the first study relating greenwashing to organizational cynicism, while previous studies have investigated cynicism in the context of employing organizations and organizational change (e.g., Naus et al., 2007; Noer, 2009; Stanley et al., 2005; Wanous et al., 2004). Third, this study contributes to extending the knowledge regarding the contingent factors that may influence job performance (e.g., John et al., 2019) by highlighting the moderating effect of green values in predicting employee reactions to organizational greenwashing. Fourth, we contribute to the hypocrisy research by confirming the negative impact of word-deed inconsistency on employee outcomes in the CER context and echoing the call

to extend the empirical context of to emerging economies (Scheidler et al., 2019).

The remainder of the present article is organized as per the following sections: Literature Review and Theoretical Background, Hypothesis Development, Methods, Results, and Discussion, the last of which presents the theoretical and practical implications of the study as well as its limitations and directions for future research.

## 2 | LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

### 2.1 | Impact of greenwashing on organizational performance and stakeholders' reactions

Greenwashing is usually conceptualized as an organizational behavior that releasing disinformation so as to pretend to be environmentally responsible (Furlow, 2010; Mitchell & Ramey, 2011). In other literature, greenwashing is defined as selectively disclosing a company's green achievements while maintaining its information on environmental irresponsibility (Lyon & Maxwell, 2011) or engaging in symbolic actions like green communication without making a substantive effort to improve its environmental performance (Delmas & Burbano, 2011; Walker & Wan, 2012).

Since the public understands greenwashing as deceptive and misleading, scholars warn that greenwashing may send a negative signal to stakeholders and thereby undermine a firm's profitability (Walker & Wan, 2012). However, empirical research on whether a greenwashing strategy pays and its underlying mechanisms is still limited, and existing studies have resulted in contradictory conclusions. For instance, Lyon and Montgomery (2015) recently reviewed 98 articles on greenwashing, finding that only a few studies examined the greenwashing-performance relationship. Walker and Wan (2012) established a negative effect of greenwashing on financial performance, whereas Testa et al. (2018) discovered an insignificant greenwashing-performance relationship. Thus, careful and thorough empirical investigations on the underlying mechanism of greenwashing's organizational impacts are required.

The literature indicates that the effect of greenwashing on organizational performance depends on stakeholders' perspective (Schons & Steinmeier, 2016). Seele and Gatti argued that "greenwashing is a phenomenon in the eye of the beholder and is based on stakeholders' perceptions about the authenticity of CSR communication" (Seele & Gatti, 2017, p. 242).

Some studies, by drawing on a micro-psychological perspective, have recently begun discussing how employee outcomes are affected by greenwashing, which is conceptualized as inconsistent CSR behavior. In terms of emotional outcomes, greenwashing causes employee emotional exhaustion (Scheidler et al., 2019). In relation to cognitive outcomes, greenwashing leads to employees' symbolic attribution of CSR behavior (Babu et al., 2020) and negative green psychological climate (Tahir et al., 2020). In terms of attitude outcomes, greenwashing can trigger departure intention (Scheidler et al., 2019), damage



employees' trust in managers (Effron et al., 2018) and environmental concern (Tahir et al., 2020). In relation to behavioral results, greenwashing can also prompt employee turnover (Scheidler et al., 2019), reduce employees' voluntary socially responsible behavior (Babu et al., 2020) and green behavior (Tahir et al., 2020). Although these studies have suggested that employees care about the (in)consistencies between an organization's CSR practices and claims, they have not provided direct evidence explaining the impact of greenwashing on organizational performance. Moreover, most of the aforementioned literature did not focus on (CER) aspect, given the concepts of CSR and CER differ in regulation, management model and stakeholder engagement, the results of previous research may not be directly transferred to the context of CER.

## 2.2 | Perceived greenwashing and job performance: The mediating role of organizational cynicism

In this study, we construct a perception–attitude–behavior conceptual model, unpacking the individual-level mediating processes of the greenwashing–performance relationship. Specifically, when employees observe their organization being involved in greenwashing activities, they may develop a cynical attitude toward their organization, and such an attitude eventually leads to a decline in their job performance.

First, we propose that employee perceived greenwashing leads to organizational cynicism. Greenwashing consists of behaviors that intentionally present false or selective information to mislead stakeholders that the organization is eco-friendly. Greenwashing is not only irresponsible to the natural environment but also damaging to the interests of consumers, investors, and governments. Greenwashing firms are viewed as untrustworthy and opportunistic (King & Lenox, 2000) and generate skepticism from external stakeholders (Aji & Sutikno, 2015). Our study suggests that greenwashing can also hurt employee trust in the organization.

Organizational cynicism can be seen as an attitudinal concept that is directly opposed to organizational trust (Chiaburu et al., 2013) including cognitive, affective, and behavioral aspects (Dean Jr et al., 1998). The cognition dimension plays a leading role in shaping the emotional and behavioral aspects of organizational cynicism (Stanley et al., 2005). Cognitive cynicism is the belief that the employing organization is lack of integrity and that the behaviors of said organization are based on self-interest and a lack of sincerity, honesty, and fairness (Dean Jr et al., 1998). Previous studies have suggested that organizational cynicism is affected by an employee's work experiences. Negative experiences such as psychological contract violations and strain positively affect organizational cynicism, while positive experiences such as workplace support, justice, and top manager credibility negatively affect organizational cynicism (Chiaburu et al., 2013). Organizational cynicism is also related to corporate social (ir)responsibility. Andersson's (1996) theoretical study argued that CSR misconduct may lead to organizational cynicism by violating distributive and procedural contracts. More recent empirical

research and meta-analysis has demonstrated that perceived CSR actions reduce employees' organizational cynicism (Sheel & Vohra, 2016; Wang et al., 2020).

Attribution theory is adopted by social psychology researchers to predict how individuals make sense of their experiences and perceive events and behavior (Malle, 2004; Weick, 1995). One stream of this research concerns dispositional attribution, which focuses on how individuals attribute others' behavior to personality (Hilton et al., 1995; Jones & Davis, 1965). Organizational cynicism can be seen as a result of dispositional attribution toward organizational behaviors. For example, cynicism regarding organizational change includes a dispositional attribution that employees view managers responsible for transformational failures as incompetent and unmotivated (Wanous et al., 1994; Wanous et al., 2004). Similarly, given the deceptive nature of greenwashing, employees would see top management or organizational or personality as lacking integrity and credibility. Based on attribution theory, we propose that employee perceived greenwashing leads to cognitive organizational cynicism.

Second, we propose that organizational cynicism has negative implications for employee OCB and task performance. Social exchange theory is an influential conceptual framework for predicting how individual actions are contingent on rewarding reactions from others in the organization (Blau, 1964; Cropanzano and Mitchell, 2005). The theory suggests that employees form socio-emotional benefits exchange relationships with their organization at work. The establishment of social exchange relationships is based on a high level of trust and honesty (e.g., Graen & Scandura, 1987; Sherony & Green, 2002), worthwhile benefits, and a belief that the exchange of these benefits is fair and reasonable (Cropanzano et al., 2003). Employee feedback on corporate behavior follows the reciprocity principle (Gouldner, 1960). A high-quality social exchange relationship means an employee tends to have deeper personal attachments and obligations to an organization, which in turn lead to more OCB and better task performance (Cropanzano et al., 2003).

Cynical employees, who believe that their organizations often sacrifice ethical principles for expediency and that self-interest and duplicity are common in their organization (Dean Jr et al., 1998), may perceive the absence of a close connection between their job performance and socio-emotional rewards (Wilkerson, 2002). Cynical employees experience disappointment and frustration with an organization and experience negative emotions like anger, shame, distress, and anxiety (Dean Jr et al., 1998), leading to misplaced, misapplied, and denied pride (Waring, 2009). Those negative feelings and thoughts can be seen as costs that reduce the benefits that employees receive from an organization. Organizational cynicism, because it engenders distrust and emotional cost, should impede the development of high-quality social exchange relationships. Consequently, given that the absence of a social exchange relationship should lead to low in-role and extra-role performance (Cropanzano et al., 2003; Rupp & Cropanzano, 2002), a cynical employee will exhibit lower task performance and less OCB.

Some empirical evidence has demonstrated the negative relationship between organizational cynicism and employee workplace effort. The meta-analysis of Chiaburu et al. (2013) noted that employee

cynicism has a negative relationship with job performance. Kim et al. (2009) found that a reduction in organizational cynicism caused by top management's credibility could lead to an increase in employees' organizational commitment and job performance.

Accordingly, the following hypothesis is proposed.

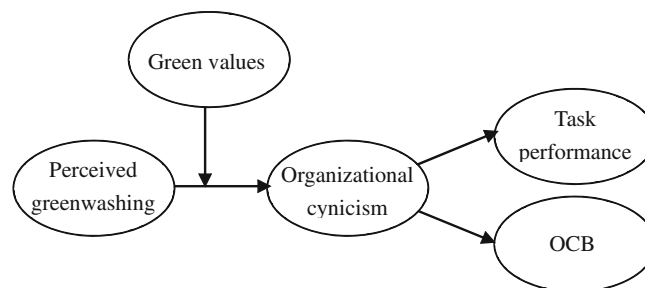
**Hypothesis 1a.** *Perceived greenwashing negatively affects task performance through the mediation of organizational cynicism.*

**Hypothesis 1b.** *Perceived greenwashing negatively affects OCB through the mediation of organizational cynicism.*

## 2.3 | Moderating effect of green values

The term “green values” refers to an individual paying personal attention to the natural environment (Bissing-Olson et al., 2013; Hawcroft & Milfont, 2010). Individuals with high-level green values believe that human beings are part of the natural world, and that due to the limited load capacity of earth, economic growth should be based on a balanced ecosystem and not be pursued at the cost of ecological damage (Dunlap et al., 2000). Emerging economies like China still face serious environmental pollution and ecological destruction. As the largest carbon emitter globally, China's environmental problem has caused a loss equivalent to 8% of the annual gross domestic product (Chan, 2010). Since the Fifth Plenary Session of the 16th Communist Party of China (CPC) Central Committee in 2006, the idea of harmonious development has become very influential among Chinese people and has precipitated more concern about natural environmental protection (See, 2009). With the guidance of this concept, employees with high-level green values are likely to be concerned about the corporate environmental practices of their organization. Most previous studies regard personal green values directly or indirectly affect an employee's green behavior (e.g., Bissing-Olson et al., 2013; Tian et al., 2020), but research seldom explore its moderating role between corporate irresponsibility and employee outcomes.

The person–organization fit (PO fit) perspective (Kristof, 1996) provides a useful paradigm for predicting which employees are likely to negatively react to greenwashing. The PO fit perspective highlighted the implication of the degree of fitness between the employee's personal characteristics and the working environment (Tom, 1971). The concept of PO fit includes shared values and goals of organization and its employees, and the extent to which the resources provided by organizations meet employees' needs (Kristof-Brown et al., 2005). Recent studies have noted that PO fit on green values could not only affect employee environmental behavioral outcomes (De Groot & Steg, 2010) but also affect non-environmental outcomes such as job satisfaction, creativity (Spanjol et al., 2015), and workplace engagement (Hicklenton et al., 2019). Organizational cynicism may be caused by a lack of alignment between employees' personal values and organizational value. Naus et al. (2007) provided empirical evidence showing that PO value misfit indeed has a positive impact on organizational cynicism. They argued that a cynical



**FIGURE 1** Theoretical framework

attitude is a self-protection mechanism, protecting employees' self-esteem from the damage caused by a PO value misfit (Naus et al., 2007). According to this perspective, this study expects that employees' environmental attitude and corporate greenwashing jointly predict organizational cynicism because of the PO value misfit.

Employees with higher green values are more likely to have a strong sense of CER actions and engage in green practices (Tian et al., 2020) as well as be aware of the negative impact of corporate greenwashing. They are more likely to experience PO misfit with a greenwashing organization and consequently exhibit a more cynical attitude. However, for employees with lower green values, greenwashing is less likely to cause PO misfit—it even be regarded as an acceptable strategy to maximize profit—and therefore has a weaker effect on organizational cynicism. Specifically, green values moderate the effect of greenwashing on organizational cynicism. Since organizational cynicism plays an intermediary role between greenwashing and job performance, green values moderate the greenwashing–job performance (i.e., task performance and OCB) relationship via organizational cynicism (see Figure 1). Therefore, we hypothesize the following.

**Hypothesis 2a.** *The indirect influence of perceived greenwashing on task performance is moderated by an employee's green values. When an employee has high-level green values, perceived greenwashing has a more negative effect on task performance through organizational cynicism.*

**Hypothesis 2b.** *The indirect influence of perceived greenwashing on OCB is moderated by an employee's green values. When an employee has high-level green values, perceived greenwashing has a more negative effect on OCB through organizational cynicism.*

## 3 | METHODS

### 3.1 | Sample

We issued questionnaires to 400 employees in 20 Chinese companies that have publicly claimed to undertake environmental responsibility. The participants came from Guangdong, Jiangsu, and Hubei province

and are chosen from various industries, including construction, manufacturing, energy, and real estate industries. The data was collected from an online survey via email and the social media Wechat. To minimize common method variance, we asked the respondents to answer two anonymous questionnaires with a 2-month lag between them (Podsakoff et al., 2003). We measured the independent variable, mediator, and moderator at Time 1 and the dependent variables after 2 months at Time 2. The respondents were informed that there were no correct or incorrect answers. We collected data from different sources, including senior managers, middle managers, and front-line employees.

In total, 298 individuals responded to the questionnaire, representing an overall response rate of 74.5%. After excluding the responses with incomplete information, a total sample of 244 questionnaires were left for further analysis. In the final sample, there are 58 enterprises, including 27 construction enterprises, 18 manufacturing enterprises, 5 energy enterprises, and 8 real estate enterprises. Thirty-six firms had 800 or more employees and 22 firms had less than 800. Table 1 presents the characteristics of the sample.

## 3.2 | Measures

All constructs were rated on a 7-point Likert scale in which “1” represented strong disagreement and “7” indicated strong agreement. Items for the English questionnaires were translated into Chinese. In this study, translators were required to be skilled in both languages to ensure the accuracy of the translation. To ensure the accuracy and corrected the ambiguity of the questions, 35 questionnaires were randomly distributed before the formal survey.

### 3.2.1 | Perceived greenwashing

We used the four-item scale provided by Ferrón-Vilchez et al. (2021) to measure employee perceived corporate greenwashing. One example item was “My company presents ambiguous messages about its environmental behavior.” The Cronbach's alpha value for the items was 0.874.

### 3.2.2 | Organizational cynicism

We measured organizational cynicism using a five-item scale for cognitive cynicism provided by Pugh et al. (2003). One item was “I believe that our firm says one thing but does another.” The Cronbach's alpha value was 0.835.

### 3.2.3 | Task performance

We employed a four-item scale provided by Cheng et al. (2003) to measure task performance. One item was “How would you rate your own work performance? In other words, are you able to complete quality work on time?” The Cronbach's alpha value was 0.839.

**TABLE 1** Description of sample characteristics (N = 244)

<b>Gender</b>	
Female	23%
Male	77%
<b>Age</b>	
<25	7%
26–35	41%
36–45	39%
>45	13%
<b>Educational background</b>	
College degree	19%
Bachelor degree	72%
Master or doctoral degree	9%
<b>Organizational tenure</b>	
<1 year	11%
1–3 years	15%
3–5 years	11%
5–10 years	20%
>10 years	43%
<b>Job level</b>	
Non-management	28%
First-line management	38%
Middle management	30%
Senior management	4%
<b>Sector</b>	
Construction	59%
Manufacturing	26%
Energy	11%
Real estate	4%
<b>Firm size</b>	
Less than 200 employees	3%
200–499	22%
500–799	29%
800–1499	32%
1500 or more employees	14%

### 3.2.4 | OCB

We measured OCB by using a 5-item scale from Hui et al. (2004). A sample item was “I am willing to spend my time helping others to resolve problems in their work.” The Cronbach's alpha value was 0.856.

### 3.2.5 | Green values

The New Ecological Paradigm, which is a 15-item scale developed by Dunlap et al. (2000), was used to assess green values. A higher score indicates ecocentrism, which is a nature-centered value that humans are a part of nature and are rapidly approaching the limits of the earth's carrying capacity. Conversely, a lower score reflects a



**TABLE 2** Confirmatory factor analysis

Model	$\chi^2$	df	RMSEA	TLI	CFI
Five-factor model <sup>a</sup>	692.39	485	0.042	0.980	0.982
Four-factor model <sup>b</sup>	1179.65	490	0.076	0.934	0.939
Three-factor model <sup>c</sup>	2043.81	494	0.114	0.853	0.862
Two-factor model <sup>d</sup>	3001.24	495	0.144	0.762	0.777
One-factor model <sup>e</sup>	4172.25	495	0.175	0.651	0.673

<sup>a</sup>Research model.<sup>b</sup>Task performance and OCB combined.<sup>c</sup>Perceived greenwashing and organizational cynicism combined; task performance and OCB combined.<sup>d</sup>Perceived greenwashing, organizational cynicism combined and green values combined; task performance and OCB combined.<sup>e</sup>All variables combined.

human-centered view, which believes that humans are separated from and superior to nature and that natural entities are resources for human use. The Cronbach's alpha value was 0.978.

### 3.2.6 | Controls

Job satisfaction is an important factor influencing job performance (Rich et al., 2010). We therefore controlled for job satisfaction in our model by adopting a one-item scale ("Overall, I am very satisfied with my job"; where "1" represents very strong disagreement and "7" represents very strong agreement). As the environmental regulation is more serious in high polluting sectors, an employee from the high polluting sector could be more sensitive to greenwashing behavior. The Chinese government issued the Catalog of Business Classification Management for Key Industries Requiring Cleaner Production Audit in 2010, which identified 21 industries that require strict environmental regulation. We create a dummy variable: polluting sector, which equals 1 for employees who work in one of the 21 industries listed in the Catalog and 0 otherwise. We also controlled for demographic variables—including gender, age, educational background, organizational tenure, and job level—given that they can affect the employee outcomes in the study (John et al., 2019).

### 3.3 | Measurement validation

Here, we employed confirmatory factor analyses to conducted model fit-test. The research model includes five constructs (i.e., perceived greenwashing, organizational cynicism, green values, task performance, and OCB). The root mean square error of approximation (RMSEA), Tucker–Lewis index (TLI), and maximum likelihood-based comparative fit index (CFI) were used to measure model fitness. Table 2 shows that the fit between five-factor research model ( $\chi^2 = 692.39$ ,  $df = 485$ ,  $p < 0.01$ ,  $RMSEA = 0.042$ ,  $TLI = 0.980$ ,  $CFI = 0.982$ ) and the observed data are good, since the value of RMSEA was less than 0.06, and the TLI and CFI values were greater than 0.95 (Hu & Bentler, 1999). Then, we compared our theoretical five-factor model to all alternative models, such as a four-factor model with a combined measure of task performance and OCB

**TABLE 3** Descriptive statistics and correlation matrix

Variables	Mean	SD	Alpha	Rho	AVE	MSV	1	2	3	4	5	6	7	8	9	10	11	12
Perceived greenwashing	2.68	2.50	0.874	0.878	0.715	0.209	1											
Organizational cynicism	2.81	2.60	0.835	0.774	0.553	0.347	0.41**	1										
Green values	3.79	3.86	0.978	0.987	0.868	0.179	−0.29**	0.36**	1									
Task performance	5.16	5.40	0.839	0.825	0.647	0.346	−0.41**	−0.50**	−0.12**	1								
OCB	6.03	6.00	0.856	0.889	0.697	0.287	−0.33**	−0.48**	−0.18**	0.48**	1							
Gender	1.23	1.00	–	–	–	–	0.17*	0.21**	−0.02	−0.17**	−0.07	1						
Age	2.57	3.00	–	–	–	–	−0.02	−0.04	−0.02	0.05	−0.03	−0.11	1					
Educational background	2.89	3.00	–	–	–	–	0.02	0.13*	0.02	−0.10	−0.04	0.19**	−0.08	1				
Organizational tenure	3.68	4.00	–	–	–	–	0.08	0.12	0.05	−0.07	−0.06	−0.03	0.56**	0.10	1			
Job level	2.09	2.00	–	–	–	–	−0.03	−0.02	−0.03	0.02	0.01	−0.15*	0.31**	0.13	0.48**	1		
Job satisfaction	3.23	3.00	–	–	–	–	−0.25**	−0.51**	−0.20**	0.46**	0.52**	−0.16*	0.01	−0.22**	−0.15*	−0.05	1	
Polluting sector	0.54	0.49	–	–	–	–	−0.16*	0.15*	0.62**	−0.03	−0.05	−0.02	−0.02	0.00	0.07	0.13*	0.13*	1

Note: Alpha is Cronbach's alpha reliability index; Rho is Jöreskog's rho composite reliability index.

Note: \* $p < 0.05$ , \*\* $p < 0.01$ .

( $\chi^2 = 1179.65$ ,  $df = 490$ ,  $p < 0.01$ ,  $RMSEA = 0.076$ ,  $TLI = 0.934$ ,  $CFI = 0.939$ ). The results in Table 2 indicate that our theoretical model produces better fit to the data than other models.

Then, we calculated the average variance extracted (AVE) and maximum shared variance (MSV) to test the convergent and discriminant validities of the scales (Hair et al., 2010). The results showed that AVE was greater than 0.50 and that MSV was less than the AVE, which confirms the presence of convergent and discriminant validities. Furthermore, Cronbach's alpha reliability indices and Jöreskog's rho composite reliability indices were greater than 0.8 and 0.7, respectively (Fornell & Larcker, 1981; George & Mallery, 2003), confirming the reliability of scales (Appendix A). The values of all the aforementioned indices are shown in Table 3.

### 3.4 | Common method variance test

We compared the fit of five-factor research model to a six-factor model with an unmeasured latent common method variance factor (Podsakoff et al., 2003). The results demonstrated that the six-factor model ( $\chi^2 = 617.06$ ,  $df = 483$ ,  $p < 0.01$ ,  $RMSEA = 0.034$ ;  $TLI = 0.987$ ;  $CFI = 0.989$ ) did not significantly improve the fitness of the five-factor research model ( $\Delta RMSEA < 0.05$ ,  $\Delta TLI < 0.1$ ,  $\Delta CFI < 0.1$ ). Thus, this study was not threatened by serious common method variance.

## 4 | RESULTS

This study conducted a descriptive analysis of the data using SPSS and tested the hypothesized model using AMOS 24.

### 4.1 | Descriptive statistics

Table 3 presents the descriptive statistics and Pearson correlation matrix, indicating that the values of the correlation coefficients were as expected. Age, job level, organizational tenure and polluting sector were not significantly correlated with the dependent variables; consequently, we excluded these control variables from subsequent analyses (Becker et al., 2016).

Structural equation modeling (SEM) is widely used for a simultaneous analysis of all the study variables and followed bootstrapping approach (Preacher & Hayes, 2008). Thus, we drew and ran the structural model using the AMOS 24 statistical software module to test the hypotheses. The orthogonal interaction method was used to calculate the interaction term of green values and perceived greenwashing to test the moderating role of green values.

### 4.2 | Results of hypothesis 1

Hypothesis 1 states that perceived greenwashing negatively influence the task performance and OCB via the mediating role of

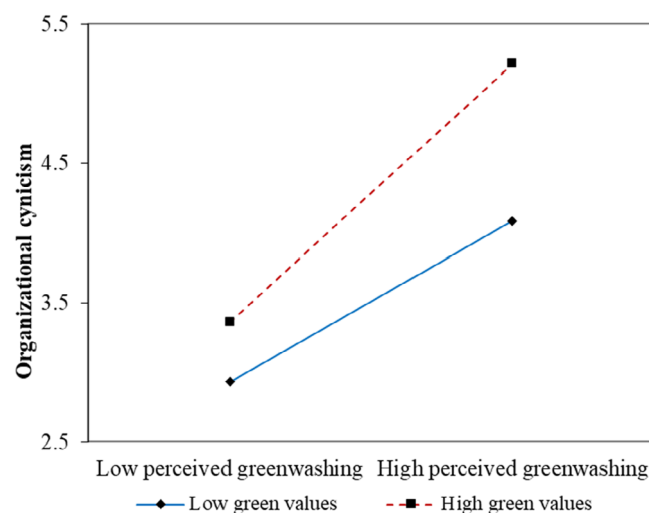
organizational cynicism. Table 4 presents evidence supporting the hypothesis that perceived greenwashing has a significant and positive relationship with organizational cynicism ( $c = 0.430$ ,  $p < 0.001$ ) and

**TABLE 4** Structural equation model results

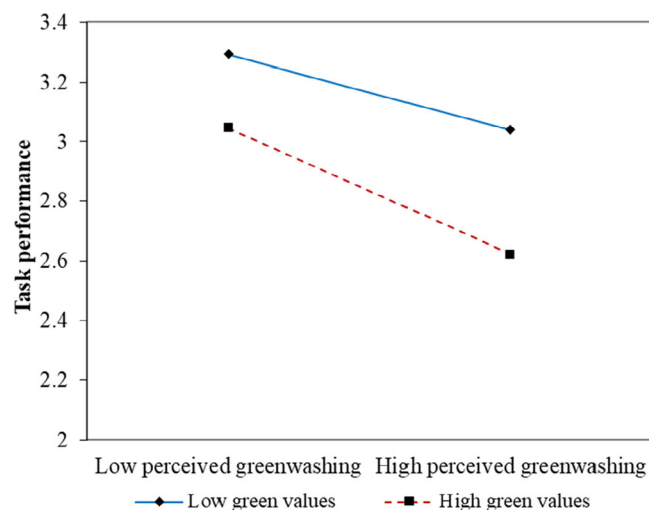
Indirect and direct effect	Coefficients	p-value
<b>Direct effect</b>		
Perceived greenwashing→Organizational cynicism	0.430	***
Organizational cynicism→Task performance	−0.394	***
Organizational cynicism→OCB	−0.394	***
Perceived greenwashing × Green values→Organizational cynicism	0.042	****
Perceived greenwashing→Task performance	−0.171	*
Perceived greenwashing→OCB	−0.237	**
Perceived greenwashing × Green values→Task performance	−0.013	ns
Perceived greenwashing × Green values→OCB	−0.041	ns
<b>Indirect effect</b>		
Perceived greenwashing→Organizational cynicism→Task performance (H1a)	−0.172	**
Perceived greenwashing→Organizational cynicism→OCB (H1b)	−0.168	**
Perceived greenwashing × Green values→Organizational cynicism→Task performance (H2a)	−0.028	*
Perceived greenwashing × Green values→Organizational cynicism→OCB (H2b)	−0.027	*

Abbreviation: ns, not significant.

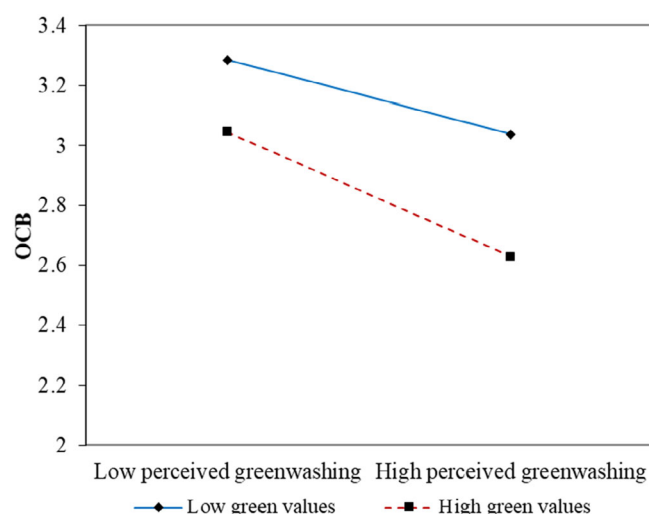
Note: \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ , \*\*\*\* $p < 0.10$ .



**FIGURE 2** Effect of perceived greenwashing on organizational cynicism at different levels of green values [Colour figure can be viewed at [wileyonlinelibrary.com](https://onlinelibrary.wiley.com/doi/10.1002/csr.2321)]



**FIGURE 3** Indirect effect of perceived greenwashing on task performance at different levels of green values [Colour figure can be viewed at [wileyonlinelibrary.com](https://onlinelibrary.wiley.com/doi/10.1002/csr.2321)]



**FIGURE 4** Indirect effect of perceived greenwashing on organizational citizenship behavior (OCB) at different levels of green values [Colour figure can be viewed at [wileyonlinelibrary.com](https://onlinelibrary.wiley.com/doi/10.1002/csr.2321)]

that organizational cynicism has a significant and negative impact on employees' task performance ( $c = -0.394, p < 0.001$ ) and OCB ( $c = -0.394, p < 0.001$ ).

The mediating effect of organizational cynicism was tested using the bootstrapping method at a 95% confidence interval. The results imply that the standardized indirect mediating effect of perceived greenwashing on task performance ( $c = -0.172, p < 0.01$ ) and OCB ( $c = -0.168, p < 0.01$ ) through organizational cynicism is negative and significant, supporting Hypotheses 1a and 1b.

### 4.3 | Results of hypothesis 2

Hypothesis 2 proposes that green values moderate the impact of perceived greenwashing on task performance and OCB via organizational cynicism. The results in Table 4 indicate that the interaction term (i.e., perceived greenwashing  $\times$  green value) positively and significantly affects organizational cynicism ( $c = 0.042, p < 0.1$ ). Moreover, we used the bootstrapping method at a 95% confidence interval to test how green values moderate the perceived greenwashing–job performance relationship through organizational cynicism. The results show significant and negative standardized indirect effects of the interaction term (i.e., perceived greenwashing  $\times$  green values) on task performance ( $c = -0.028, p < 0.05$ ) and OCB ( $c = -0.027, p < 0.05$ ) via organizational cynicism, supporting Hypotheses 2a and 2b.

To better understand of this moderation, we plotted an interaction graph (Aiken et al., 1991). Figure 2 shows that the positive effect of perceived greenwashing on organizational cynicism was stronger under high-level green values, whereas perceived greenwashing has a weaker effect on cynicism when an employee's green values are low. Figures 3 and 4 show that the negative indirect effects of perceived greenwashing on task performance and OCB were stronger under high-level green values, whereas perceived greenwashing has a weaker impact on task performance and OCB when an employee's green values are low.

### 4.4 | Robustness tests

To test the robustness of the results, we used conditional process analysis introduced by Hayes (2013) as an alternative approach. Since

**TABLE 5** Conditional process analysis results

Effects	Green values	Coefficients	SE	CI
Indirect effects of perceived greenwashing on task performance through organizational cynicism for three levels of green values	−1 SD (3.24)	−0.089	0.029	−0.150, −0.036
	Mean (4.79)	−0.105	0.032	−0.172, −0.045
	+1 SD (6.34)	−0.120	0.039	−0.202, −0.049
Indirect effects of perceived greenwashing on OCB through organizational cynicism for three levels of green values	−1 SD (3.24)	−0.091	0.032	−0.159, −0.033
	Mean (4.79)	−0.105	0.034	−0.176, −0.042
	+1 SD (6.34)	−0.119	0.041	−0.207, −0.046

Note: CI is confidence interval; +1 SD is one SD above the mean of the green values; −1 SD is one SD below the mean of the green values; Mean is the mean of the green values.





conditional process analysis is not able to process latent variables like SEM approach, we took average of observed variables as proxies (Hayes et al., 2017). SPSS PROCESS software module is used to ran the model. Table 5 shows that the indirect effect of perceived greenwashing on task performance and OCB, through organizational cynicism, were negative and significant for employees with three levels of green values, as confidence intervals did not contain zero. Moreover, the indirect effects were stronger for employees with high green values than employees with moderate and low green values. The results of the conditional process analysis have no significant difference compared with the results of SEM, indicating the robustness of our model.

## 5 | DISCUSSION

Recent empirical research has found that the influence of greenwashing on corporate financial performance is ambivalent (Testa et al., 2018; Walker & Wan, 2012). Although previous studies have found that greenwashing leads to external stakeholders' negative reaction, there has been limited research investigates greenwashing's consequences from the perspective of employee attitudes and behavior. By considering the roles of organizational cynicism and green values in perceived greenwashing–job performance (i.e., task performance and OCB) relationship, this study generated the following findings.

First, we discovered that perceived greenwashing has a negative impact on task performance ( $c = -0.172, p < 0.01$ ) and OCB ( $c = -0.168, p < 0.01$ ) by causing organizational cynicism ( $c = 0.430, p < 0.001$ ). Our study shows that perceived greenwashing has significant effects on employee behavioral and attitude outcomes, comparing with previous finding on equivalent form of CSR communication. For example, Scheidler et al. (2019) find that different in corporate external CSR communication and internal implement leads to employee emotional exhaust ( $c = 0.03, p < 0.06$ ), intention to quit ( $c = 0.03, p < 0.05$ ) and turnover ( $c = 0.27; p < 0.001$ ). Babu et al. (2020) find that hypocrisy is negatively related to employee social responsibility ( $c = -0.23; p < 0.05$ ) through the mediating effect of symbolic CSR attributions ( $c = 0.40, p < 0.01$ ).

Second, our finding also in line with studies focusing on the role of Chinese employees in CER (Lu et al., 2017; Wu et al., 2018). Chinese employee is proved to pay more attention to environmental issues and engaging in pro-environmental behavior with the implement of green compensation and training (Zhang & Sun, 2021) and the influence of green leadership (Graves et al., 2013). However, despite the importance of employees' pro-environmental behavior in promoting CER, literature has offered little knowledge on whether Chinese employee play a role in supervise and punish the hypocrisy in CER. Given that environmental pollution has become a serious social issue in China, and that the government and the media actively urge enterprises to implement environmental management, the employees pay more attention to the substance of CER activities. CER was proved to related to employee commitment (Dögl &

Holtbrügge, 2014) and job satisfaction (Pinzone et al., 2019). Therefore, employees may not identify with the corporate greenwashing behavior, and believe that it is not worthwhile to work hard for an environmental irresponsible organization, which leads to a reduction of in-role and extra-role job performance.

Third, this research demonstrates the effect of perceived greenwashing on job performance is mediated by organizational cynicism, supporting previous findings that CSR influences employee workplace behavior via the mediating effect of employee attitudinal outcomes (e.g., Hansen et al., 2011; John et al., 2019; Vlachos et al., 2014). Our finding suggests that the experience of perceiving greenwashing behaviors may trigger employees' dispositional attribution toward organizational personality and leads to a belief that the greenwashing organization is dishonest. Such cynical attitude damages the exchange relationship between employee and organization, reduces employees' enthusiasm in their work (Kim et al., 2009).

Finally, the study determines that the path of perceived greenwashing influencing job performance mediated by organizational cynicism is moderated by employees' green values. Theoretical studies have suggested that the consequences of organization misconduct can be contingent on stakeholders' personalities (Barnett, 2014). Green values represent an ecocentric view of the relationship between human being and nature, which highly related to employees' intrinsic need satisfaction and guide their evaluation to CER actions. Employees with high-level green values are more likely to experience PO value misfit when working in a greenwashing firm, reduce employees' intrinsic need satisfaction and workplace engagement (Hicklenton et al., 2019). Therefore, the higher the employee's green value is, the higher the organizational cynicism and the lower the job performance will be when they perceive greenwashing.

## 6 | CONCLUSION AND IMPLICATIONS

### 6.1 | Conclusion

Based on the attribution theory and social exchange theory, this study investigated the underlying mechanism of perceived greenwashing influencing employee job performance by considering the mediating effect of organizational cynicism and the moderating effect of green values. Based on the sample of 244 employees from China, we find that organizational cynicism plays a mediating role, while green values boost the negative impact of perceived greenwashing on job performance through the mediating effect of organizational cynicism.

### 6.2 | Theoretical implications

First, this research contributes to resolving the debate about whether it pays for corporations to greenwash. Lyon and Montgomery (2015), in their theoretical review of greenwashing issues, noted the need for more empirical research on the impact of greenwashing. From the stakeholder perspective, the stakeholder relationship is a strategic

resource for enterprises to gain a competitive advantage, so enterprises should integrate stakeholder interests into their strategy (Freeman et al., 2004). From this perspective, various stakeholders' reactions can be seen as the route through which greenwashing affects corporate performance. Previous studies have focused on how greenwashing gives rise to external stakeholders' reactions (e.g., Du, 2015; Nyilasy et al., 2014; Zhang et al., 2018); however, research regarding internal stakeholders is very limited. Our research fills this gap by highlighting the negative employee outcomes caused by corporate greenwashing. Specifically, we attempt to examine how greenwashing affects task performance and OCB via organizational cynicism and how employees' personal attitudes toward CSR moderate this affect, thereby making a theoretical contribution to the greenwashing literature.

In additional, our study introduces a micro-level approach to the corporate greenwashing literature. The literature review of Aguinis and Glavas (2012) called for more individual-level research and investigations of the interrelationship between individual-level and organizational-level aspects. Consistent with this suggestion, we associate employee attitudinal and behavioral outcomes with CER activities and performance, and offer theoretical explanations for how greenwashing affects employee outcomes. That is, once identified, greenwashing can cause employees to lose trust in their organization and undermine the social exchange relationship between employees and organizations, which leads to a decline in an organization's internal efficiency.

Second, previous research has regarded employee cynicism as an attitudinal outcome caused by organizational change, massive layoffs, and increasing compensation disparities (e.g., Naus et al., 2007; Noer, 2009; Stanley et al., 2005). Our results extend this research by examining how employees' greenwashing perceptions relate to employee cynicism, and how cynicism influences job performance. Based on attribution theory, we provide the mechanism underlying the perceived greenwashing–organizational cynicism relationship—that employee makes dispositional attributions that the organization and top management lack credibility and integrity based on perceived greenwashing behaviors. By applying social exchange theory, we further clarify that cynicism damages the basis of the organization–employee social exchange relationship, and increases the costs required to maintain such a relationship, thus leading to a decline in job performance. This finding can generally be seen as support for the systems view of an organization (Beer, 1980), which holds that an organization is a complex system in which all factors are interdependent. Our research shows how seemingly distinct CER communications and organizational cynicism and job performance are interrelated; that is, although greenwashing does not pose a direct threat to employees' interests, it still affects employees' attitudinal and behavioral outcomes through the dispositional attribution process and by damaging the social exchange relationship.

Third, in line with the PO fit perspective and related studies, we found support for the moderating influence of green values. Our empirical findings show that the effects of greenwashing on organizational cynicism and job performance are greater when employees' green values are high, while the effects are weaker when their green values are low. These results indicate the important role of green

values in predicting employees' reactions to greenwashing, contributing to extending the knowledge about the contingent factors that may influence job performance (e.g., John et al., 2019).

Fourth, Scheidler et al. (2019) suggested that future greenwashing research should be extended to emerging economies, as employees' attitudes toward CER may differ from those in developed countries. This study responds to this suggestion by exploring the issue in China, a developing country facing environmental protection and economic growth challenges. Our work may help and guide scholars in investigating the micro-level implications of greenwashing in various cultural and institutional contexts, especially in emerging economies.

### 6.3 | Practical implications

This study indicates that employees do indeed care about and can identify the authenticity of their organization's CER communications, and highlights the fact that employees' perception of corporate greenwashing could influence their attitudes. Our research suggests that managers should be careful about potential risks when conducting green communications. Human resources departments should work with CSR managers to ensure that information regarding green production, supply chains, and research and development showing real effort is widely communicated within the organization. Such information is substantive and difficult to imitate and thus sends a stronger signal to the relevant stakeholders (Berrone et al., 2017). By doing so, a corporation could strengthen their green trust and reduce employee skepticism, leading to win-win achievements for financial and environmental performance (Hart, 1995).

Moreover, the mediating role of organizational cynicism implies that firms should reduce organizational cynicism to maintain employees' enthusiasm and reduce the negative consequences of perceived greenwashing to maintain organizational productivity. Given that employees' greenwashing perception is not only related to a company's CER communications strategy but also depends on employees' expectations, media reports (Seele & Gatti, 2017), and word-of-mouth among individuals (Chen et al., 2014; Zhang et al., 2018), the CSR and HR departments should coordinate to undertake interviews and surveys to monitor employees' skepticism and psychological reactions toward corporate environmental communications and other symbolic CSR actions.

Finally, employees' green values lead to more organizational cynicism and a greater reduction in job performance when they identify their organization's greenwashing behavior. The finding implies that employees with higher levels of green values would experience more PO misfit and therefore would be more likely to punish corporate greenwashing behavior. This shows the importance of employees' role in corporate CSR governance. Governments should strengthen the publicity and education about environmental issues, encourage individuals to engage in environmental protection, and improve their capability to evaluate the authenticity of corporate green communications to help reduce greenwashing and achieve sustainable development.

## 6.4 | Limitations and future research directions

The present study has some limitations. First, the generalizability of our findings may be limited as we only surveyed Chinese companies, which calls for future research to confirm the constancy of the findings. Scholars should be cautious when applying our results to other countries to consider the cultural and institutional differences.

In additional, the self-reported data that were collected may have been subject to selection and common method biases (Podsakoff et al., 2003). Future research could obtain data from different sources, such as other-reported employee job performance.

Second, we only considered the mediating effect of organizational cynicism and the moderating effect of green values in perceived greenwashing–job performance linkage. Future research could involve other mediators and moderators influencing this relationship such as organizational pride, moral identification (May et al., 2015), and green skepticism (Leonidou & Skarmas, 2017).

Third, another limitation is derived from the research scope. Although the greenwashing literature focuses on environmental domain sustainability, research examining the decoupling of symbolic and substantive action in other domains is limited. Based on the “triple bottom line” theory, CSR is a multidimensional concept (Stiller & Daub, 2007). Future studies should measure and compare different types of greenwashing by including social and economic issues, which may lead to new conclusions in terms of employees' concerns and expectations regarding various CSR dimensions.

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## APPENDIX A

### SCALES

#### (1) Perceived greenwashing (Ferrón-Vílchez et al., 2021)

- (1) My company presents ambiguous messages about its environmental behavior.
- (2) My company provides unprovable information about its environmental achievements.
- (3) My company provides an exaggerated message about its environmental performance.
- (4) My company selectively discloses its environmental activities or hides information about its environmental misconduct.

#### (2) Organizational cynicism (Pugh et al., 2003)

- (1) I believe that our firm says one thing but does another.
- (2) Our firm's policies, goals, and practices, seem to have little in common.
- (3) Top management expects one thing of its employees, but rewards another.
- (4) When our firm claims to do something, I wonder if it will really happen.
- (5) I see little similarity between what my company says it will do and what it actually does.

#### (3) Task performance (Cheng et al., 2003)

- (1) How would your supervisor rate your quality of work? In other words, are your work outcomes perfect, free of error, and of high accuracy?
- (2) How would your supervisor rate your work efficiency? In other words, what is your supervisor's assessment of your work speed or quantity of work?
- (3) How would you rate your own work performance? In other words, are you able to complete quality work on time?
- (4) Compared to your coworkers, how would you rate your work performance?

#### (4) Organizational citizenship behavior (OCB) (Hui et al., 2004).

- (1) I am willing to help other person with an organizationally relevant task or problem.

- (2) My efforts go well beyond the minimum role requirements of the organization.
- (3) I concern and responsibly participate in the life of the organization.
- (4) I make effort to prevent work-related problems with others from occurring.
- (5) I tolerate less than ideal circumstances without complaining.

#### (5) Green values (The New Ecological Paradigm) (Dunlap et al., 2000)

- (1) We are approaching the limit of the number of people the earth can support.
- (2) Humans have the right to modify the natural environment to suit their needs.
- (3) When humans interfere with nature it often produces disastrous consequences.
- (4) Human ingenuity will insure that we do NOT make the earth unlivable.
- (5) Humans are severely abusing the environment.
- (6) The earth has plenty of natural resources if we just learn how to develop them.
- (7) Plants and animals have as much right as humans to exist.
- (8) The balance of nature is strong enough to cope with the impacts of modern industrial nations.
- (9) Despite our special abilities, humans are still subject to the laws of nature.
- (10) The so-called ecological crisis facing humankind has been greatly exaggerated.
- (11) The earth is like a spaceship with very limited room and resources.
- (12) Humans were meant to rule over the rest of nature.
- (13) The balance of nature is very delicate and easily upset.
- (14) Humans will eventually learn enough about how nature works to be able to control it.
- (15) If things continue on their present course, we will soon experience a major ecological catastrophe.