

## Ability, Motivation and Opportunity (AMO)-enhancing HRM Practices and Corporate Environmental Citizenship: The Mediation Effect of Organizational Ethical Climate

*(Amalan Peningkatan Keupayaan, Motivasi dan Peluang (AMO) Sumber Manusia dan Kewarganegaraan Alam Sekitar Korporat: Kesan Pengantara Iklim Etika Organisasi)*

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### ABSTRACT

*Ability, Motivation and Opportunity (AMO)-enhancing is essential for the effective implementation of corporate environmental citizenship. However, previous studies neglect the link between AMO-enhancing HRM practices and corporate environmental citizenship. This has motivated the paper studies the influence of AMO-enhancing HRM practices on corporate environmental citizenship via the mediating role of organizational ethical climate. This study employed a quantitative approach in the form of survey questionnaires. Survey questionnaires were collected from 200 construction companies and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The results revealed that ability and opportunity-enhancing HRM practices were found to positively influence corporate environmental citizenship. Motivation-enhancing HRM practices were insignificant in this regard. Similarly, organizational ethical climate did not prove to mediate the relationship between AMO-enhancing HRM practices and corporate environmental citizenship. Therefore, construction companies should invest heavily in ability and opportunity-enhancing HRM practices to pursue corporate environmental citizenship. Instead, construction companies can abandon motivation-enhancing HRM practices and organizational ethical climate if they have limited funds to improve corporate environmental citizenship. Ultimately, policy makers should use these findings to create strategies as guidance for the construction industry to achieve corporate environmental citizenship.*

*Keywords: Corporate environmental citizenship; ability-motivation-opportunity (AMO) enhancing HRM practices; organizational ethical climate.*

### ABSTRAK

*Amalan peningkatan keupayaan-motivasi-peluang sumber manusia adalah penting untuk pelaksanaan berkesan kewarganegaraan persekitaran korporat. Walau bagaimanapun, kajian dahulu mengabaikan hubungan antara amalan peningkatan keupayaan-motivasi-peluang sumber manusia dan kewarganegaraan persekitaran korporat. Ini telah mendorong kajian ini mengkaji pengaruh amalan peningkatan keupayaan-motivasi-peluang sumber manusia terhadap kewarganegaraan persekitaran korporat melalui peranan pengantara iklim etika organisasi. Kajian ini menggunakan pendekatan kuantitatif dalam bentuk soal selidik tinjauan. Soal selidik tinjauan telah dikumpul daripada 200 syarikat pembinaan dan dianalisis menggunakan Pemodelan Persamaan Struktur Kuasa Dua Terkecil Separa (PLS-SEM). Amalan peningkatan keupayaan dan peluang sumber manusia didapati mempengaruhi kewarganegaraan persekitaran korporat. Amalan peningkatan motivasi sumber manusia adalah tidak signifikan. Begitu juga, iklim etika organisasi terbukti tidak menjadi pengantara hubungan antara amalan peningkatan keupayaan-motivasi-peluang sumber manusia dan kewarganegaraan persekitaran korporat. Oleh itu, syarikat pembinaan harus melabur banyak dalam amalan peningkatan keupayaan dan peluang sumber manusia untuk meneruskan kewarganegaraan persekitaran korporat. Sebaliknya, syarikat pembinaan boleh melepaskan amalan motivasi sumber manusia dan iklim etika organisasi jika mereka mempunyai dana terhad untuk menambah baik kewarganegaraan persekitaran korporat. Akhirnya, penggubal dasar harus menggunakan penemuan ini untuk mencipta strategi sebagai panduan bagi industri pembinaan untuk mencapai kewarganegaraan persekitaran korporat.*

*Kata Kunci: Kewarganegaraan persekitaran korporat; Amalan peningkatan keupayaan-motivasi-peluang sumber manusia; iklim etika organisasi*

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## INTRODUCTION

These days, organizations have become more conscious of how their operations affect the environment, as shareholders, customers, policy makers and overall public concern are dramatically pressuring organizations to improve their corporate environmental citizenship (CEC). As such, organizations acknowledge the importance of the environment in their organizational strategies and strategic planning processes (Banerjee 2002; Tay et al. 2021). This is evident in Malaysian firms' environmental protection expenditure in the year 2020, which documented a three percent growth rate from 2019 (Report on the Environmental Protection Expenditure 2021). Due to increased pressures, it has become a business rule for organizations across industries and locations to involve in CEC such as attaining ISO 14001 standards, develop environmental management systems, and support environmental operations (Abdel-Baset et al. 2019).

In an effort to enhance CEC, academic attention has shifted to HRM practices that enhance employees' ability, motivation, and opportunity (AMO) (Tay et al. 2017a). Referring to the AMO theory, employees will be driven to execute their environmental tasks efficiently when motivating tactics are applied on them, such as rewards and performance management; in turn, this would help organizations minimize their carbon footprint (Rizvi & Garg 2020). Unfortunately, prior studies show a limited examination of the link between AMO-enhancing HRM practices and CEC, primarily since most studies have associated AMO-enhancing HRM practices with organizational performance (Huang et al. 2022; Li et al. 2021), health and welfare outcomes (Mariappanadar 2020), employee engagement (Mehmood et al. 2022), innovative behavior (Farrukh et al. 2021), knowledge exchange (Zhang et al. 2021), organizational resilience (Zhou et al. 2022). The understanding of how AMO-enhancing HRM practices influence CEC remains fledgling. Hence, this study narrows this gap by answering the first research question: Do AMO-enhancing HRM practices influence CEC?

Additionally, research on how AMO-enhancing HRM practices influence CEC is limited, requiring further exploration. The green innovation (Chouaibi et al. 2021; Padilla-Lozano & Collazo 2021), organizational citizenship behavior environment (Anwar et al. 2020), corporate governance (Shang et al. 2022), corporate image (Le 2022) act as a mediator in environmental studies. These studies do not explore from the viewpoint of ethics mechanism, thus suggesting organizational ethical climate (OEC) as mediator to explain how AMO-enhancing HRM practices influence CEC. Referring to Tay et al. (2017a), OEC has a broad capacity in comparison green innovation, organizational citizenship behavior environment, corporate governance and corporate image to describe behavioral outcomes (e.g., CEC). In this regard, the OEC concept under the Resource Based View

(RBV) states that the development of an ethical climate in a firm shapes employees' environmental mindset, thereby improving the firm's environmental attitude and cultivating skills that are challenging for rivals to imitate (Barney 1992). Rizvi and Garg (2020) claim that the mediating role of ethics (e.g., OEC) in guiding HRM practices to create a shift towards superior environmental performance (e.g., CEC) is understudied. In line with this, Roscoe et al. (2019) confirmed that one of the most pertinent research issues for scholars is the interplay between HRM practices and green organizational culture (e.g., OEC). To bridge this gap, the present study seeks to answer the second research question: Does OEC mediate the relationship between AMO-enhancing HRM practices and CEC?

This study offers novel insights into the link between the chosen variables in light of the AMO theory and the RBV. The findings clarify that by implementing practices that improve employees' ability to act sustainably, motivation to contribute to performance, and opportunity to do so, organizations can improve CEC. The study also explains how two organizational resources (i.e., AMO-enhancing HRM practices and OEC) can lead to the development of distinctive competencies that achieve competitiveness, as evidenced by superior CEC. The findings provide legislators and organizations a new perspective on creating policies that encourage AMO-enhancing HRM practices, OEC, and CEC activities.

The next part presents the variables' theoretical foundation, the research model, and the hypotheses. This is followed by details on the research methodology. The subsequent section concentrates on the results, discussion, and theoretical and practical implications. Finally, the researcher concludes the findings, highlights contributions, acknowledges limitations, and proposes directions for future research.

## LITERATURE REVIEW

### THEORETICAL FOUNDATION

CEC consists of four dimensions: (1) Internal Environmental Orientation (IEO), which is an organization's internally focused environmental responsibility; (2) External Environmental Orientation (EEO), which is an organization's externally focused environmental responsibility; (3) Corporate Strategic Focus (CSF), which is an organization's integration level of environmental matters in planning; and (4) Functional Strategic Focus (FSF), which is an organization's functional approach to environmental topics. Meanwhile, AMO-enhancing HRM practices can be divided into three dimensions: (1) Ability, which involves improving employees' competence via recruitment and training; (2) Motivation, which involves inspiring employees to perform through rewards and performance management; and (3) Opportunity, which involves

encouraging employees to participate using teamwork and empowerment. Finally, OEC comprises three dimensions: (1) Egoism, which refers to maximizing profit without considering environmental and societal well-being; (2) Benevolence, which refers to a concern for others' well-being; and (3) Principle, which refers to organizational rules that guide organizations' behavior.

#### DEVELOPMENT OF RESEARCH FRAMEWORK AND HYPOTHESES

##### AMO-ENHANCING HRM PRACTICES AND CEC

This study draws upon the AMO theory to explain the effect of AMO-enhancing HRM practices on CEC. AMO-enhancing HRM practices aim to hire, train, motivate, reward, and sustain employees' job and environmental behaviors through the processes of recruitment and selection, training and development, reward and performance management, and employee involvement. Specifically, recruitment and selection as well as training and development are the two key steps in developing employees' ability. Recruitment and selection ensures that environmentally conscious employees are chosen to join the firm, while training and development advances the abilities of individuals to be environment-friendly.

Pham and Paille (2020) argue that the most accurate indicator of a company's overall selection attractiveness is its environmental image, which should be seen as environmentally responsible. For example, Chaudhary (2018) noted that engineering students in India favor working with companies that promote an environmental image. Likewise, according to a survey by Robert Half Talent Solutions, 38% of respondents believe that having a genuine environmental management policy is essential for attracting and keeping young talents (Weston 2022). As a result, successful communication of an organization's ecological beliefs and environmental activities is necessary to attract candidates with pro-environmental behavior (Tang et al. 2018). Apart from that, a firm's competitiveness is demonstrated by offering training that is specific to the firm's environmental policy (Yong et al. 2019). In this regard, the human resource (HR) department is at the forefront of educating personnel about environmental issues and the company's environmental performance (Yong et al. 2019). Teixeira et al. (2016) claim that green training improves green supply chain management, which ultimately allows organizations to reduce expenses and build their reputation. Similarly, employee skills in waste reduction processes and raw material waste inspection are improved by environmental training (Masri & Jaaron 2017). Consequently, employees become more emotionally invested in raising their firms' CEC.

Next, this study points out two key practices in developing employees' motivation, namely green rewards and performance management. Green rewards encourage

employees to perform well, sustain their motivation, and highlight the importance of environmental conservation. Meriman et al. (2016) reported that employees display higher levels of environmental behavior when financial rewards are tied to their efforts in reducing environmental impacts. Numerous studies have also demonstrated that firms can achieve strong environmental performance by awarding several forms of rewards, including promotions, professional advancements, bonuses, funds, and gifts (Muisyo & Qin 2021). Implementing green rewards can further significantly increase employee innovativeness in promoting eco-initiatives and thereby generate higher CEC (Muisyo & Qin 2021). From the performance management perspective, HR managers are essential in determining how well employees perform in relation to the accomplishment of environmental goals (Roscoe et al. 2019). HR managers can create environmental indicators and evaluation processes for an organization (Masri & Jaaron 2017). Moreover, employees' environmental goals and waste reduction suggestions can be discussed with HR managers during their performance evaluations (Masri & Jaaron 2017).

Finally, employee involvement is a crucial practice to improve employees' environmental opportunities, which it does via two processes (Muisyo & Qin 2021). First, involvement grants opportunity by using employees' implicit knowledge about the company's operational functions as a starting point (Tay et al. 2017a). Second, involvement empowers employees to offer environmental suggestions to improve CEC (Tay et al. 2017a). Thus, we hypothesize that:

- H<sub>1a</sub> Ability-enhancing HRM practices have a positive relationship with CEC.
- H<sub>1b</sub> Motivation-enhancing HRM practices have a positive relationship with CEC.
- H<sub>1c</sub> Opportunity-enhancing HRM practices have a positive relationship with CEC.

##### AMO-ENHANCING HRM PRACTICES AND OEC

The relationship between AMO-enhancing HRM practices and OEC is understandable from the RBV, which suggests that such practices serve as a critical resource to achieve competitive advantages like OEC (Tay et al. 2017b). This is because these practices satisfy the RBV conditions of being valuable, rare, inimitable, and difficult to replace. AMO-enhancing HRM practices add value by reinforcing and shaping employees' ethical values; they are rare as they are deeply embedded in the organizations' policies, practices, and strategies in developing OEC; they are inimitable by being difficult to duplicate to produce OEC; and finally, they cannot be easily replaced because not every organization has similar AMO-enhancing HRM practices to foster OEC. Given these characteristics, it is reasonable to expect that

AMO-enhancing HRM practices have the potential to enhance OEC.

An organization's climate becomes ethical when employees ignore profit-seeking goals to reduce their carbon footprint (Einarsen et al. 2019). Hence, OEC is the culture, values, attitudes, and actions that organization members possess with regard to the environment (Arulrajah 2015). HR professionals facilitate an environmentally friendly organizational culture by affecting employees' values, beliefs, and behaviors through their processes of hiring, training, evaluating, and rewarding people (Tay et al. 2017b). A recent study by Rizvi and Garg (2020) identified that recruitment processes can reinforce the environmental efforts of an organization by ensuring that new hires are knowledgeable about the firm's green culture and are capable of upholding its green culture. A study by Tay et al. (2017b) also found that employees who are trained to participate in environmental activities ultimately aid in fostering a green culture within the company. Similarly, Pellegrini et al. (2018) reported that performance appraisals can contribute to green values via the usage of key performance indicators (KPIs) for employees delivering environmental projects. Specifically, they found that HR managers can encourage staff to collaborate with their colleagues to accomplish environmental projects by linking financial benefits to the achievement of KPIs, resulting in the creation of green values. Employee involvement and green teams further increase the likelihood that OEC will be formed, since environmental effort demands employees to collaborate and communicate with one another (Roscoe et al. 2019). For example, the availability of green teams and the maturity of environmental management in Brazilian enterprises were analyzed by Jabbour et al. (2013), revealing that the more intensively green teams are used, the more proactive and sophisticated the firms' approach to environmental management. As such, a green culture develops when employees work together to address environmental concerns over time (Roscoe et al. 2019). Thus, we hypothesize that:

- H<sub>2a</sub> Ability-enhancing HRM practices have a positive relationship with OEC.
- H<sub>2b</sub> Motivation-enhancing HRM practices have a positive relationship with OEC.
- H<sub>2c</sub> Opportunity-enhancing HRM practices have a positive relationship with OEC.

#### OEC AND CEC

The RBV supports OEC as a key resource as it is created rather than purchased, cannot be traded on the market, is difficult to replicate, and delivers environmental capabilities that competitors cannot easily imitate (Tay

et al. 2018). In this regard, OEC is likely to be a source of competitive advantage (e.g., CEC) as it impacts organizational members' belief that ethical behavior is an expected standard for decision making within the organization. Previous studies (Gurlek & Tuna 2017; Wang 2019) have demonstrated the power of culture in transforming organizations' current paradigms, as well as the role played by organization members as change agents in this process. It has been observed that organizations prefer to embrace a green culture if their leaders demonstrate concern for it (Luu 2018). Azhar and Yang (2021) found that leaders are in charge of communicating CEC values and exhibiting actions that demonstrate a commitment to resolving environmental problems. They also noted that leaders motivate employees to critically evaluate work processes to make them more environment-friendly. Along the same lines, Bowen (2000) reported that senior leaders communicate proactive environmental efforts to employees, which is gradually embedded in the latter's daily duties. Thus, leaders' prioritization of the environment can be reflected in employees' environmental attitude, encouraging them to focus on environmental initiatives such as eliminating waste from the manufacturing process. Employees are given signs that their employers expect, value, and reward CEC through a green culture (Dumont et al. 2017). Ergo, the dissemination of CEC practices are perceived by employees as type of higher organizational support (Norton et al. 2017). Since employees are typically encouraged to display actions that are congruent with how they view the rules, regulations, and practices of their organizations (Tay et al. 2018), we hypothesize that:

- H<sub>3</sub> OEC has a positive relationship with CEC.

#### AMO-ENHANCING HRM PRACTICES, OEC, AND CEC

In line with the RBV, AMO-enhancing HRM practices and OEC are distinctive organizational resources that are rare and difficult to imitate; thus, they facilitate higher performance and firm competitive advantages such as CEC. The RBV also supports that AMO-enhancing HRM practices play a crucial role in shaping organizational climate (e.g., OEC) to obtain desired employee attitudes and subsequently, CEC. Organizations' reliable environmental messages stimulate environmentally conscious employees to act responsibly. For instance, Guerci et al. (2015) investigated how organizations effectively recruit qualified job candidates using environmental messages shared to the public. Coinciding with this finding, Yong et al. (2019) confirmed that qualified job candidates are more likely to work with organizations that have similar environmental values. Moreover, Tay et al. (2017b) empirically established that training enhances employees' environmental knowledge, skills, and abilities, which in turn boosts employees' willingness to perform environmental tasks. A study



conducted by Gupta (2008) found that an incentive should be attached for employees when developing energy-efficient products to improve employees' adoption. Ultimately, a green culture can be developed if rewards and compensation systems are aligned with environmental behavior, leading to the achievement of CEC (Tay et al. 2018).

Yusliza et al. (2017) identified that when employees have the discretion to correct harmful activities in a company's operations, they feel empowered to make their own decisions. Indeed, the concept of employee empowerment in environmental issues has gained attention recently and is seen as an important component of environmental management (Tay et al. 2017a; Yong et al. 2019). Accordingly, Zahid Ikram et al. (2019) showed that employee empowerment raises employees'

environmental awareness and has a positive impact on firm CEC. Daily, Bishop and Massoud (2012) further revealed that the managers in their study who reported the highest levels of environmental empowerment also reported the highest levels of CEC. Therefore, we hypothesize that:

- H4a OEC mediates the relationship between ability-enhancing HRM practices and CEC
- H4b OEC mediates the relationship between motivation-enhancing HRM practices and CEC
- H4c OEC mediates the relationship between opportunity-enhancing HRM practices and CEC

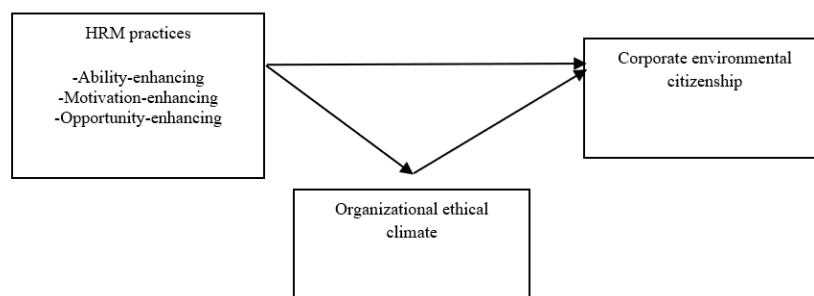


FIGURE 1. Research framework

## RESEARCH METHODOLOGY

### RESEARCH DESIGN

This study was quantitative study in nature to enable generalization of its findings to the whole population. To obtain data, questionnaires were distributed to the selected construction companies in Malaysia via email. The unit of analysis was at the organizational level, given that only one respondent (i.e., executive director or managing director) from each participating construction company was allowed to answer the questionnaire.

### POPULATION AND SAMPLE SIZE

The population of this study was construction companies in Malaysia. A number of environmental impacts are potentially caused by the construction sector; for example, construction activities like the clearing of land and trees as well as the use of concrete can damage the environment (Zutshi & Creed 2015). Thus, this sector was deemed suitable to examine the concept of CEC.

The size of the population was 2956 companies. Sample size was determined using G\*Power 3.1.9.2, a statistical software commonly employed by social science and behavioral researchers in sample size calculation (Faul et al. 2007). At a significance level of

0.05 and a power of 0.95, the G\*Power 3.1.9.2 software reported that the minimum sample size for the current study was 272.

### SAMPLING TECHNIQUE

To select the sample units using a sampling frame, the systematic sampling technique was employed. Construction Industry Development Board (CIDB) produced the directory in 2021, which served as the source of the sampling frame. A number was assigned to each of the 2956 construction companies with a sampling interval of 11 (i.e., 2956/272). Accordingly, units numbered 11, 22, 33, 44, and so on in the sequence were selected until 272 sample units were reached.

### MEASUREMENTS

The CEC measurement was adapted from Banerjee (2002), which has 16 items that evaluate the four dimensions of CEC, namely IEO, EEO, CSF, and FSF. An example of the items is "The firm has a responsibility to preserve the environment." Next, the scale for AMO-enhancing HRM practices was adapted from Guerci et al. (2013), which has 18 items such as "attracting and selecting employees who share the organization's values." Finally, OEC was measured using a 12-item

scale adapted from Cullen et al. (1993). A sample item is “Decisions here are primarily viewed in terms of contributions to profit.” A five-point Likert scale, ranging from 1 (mostly false) to 5 (completely true), was adopted as the response scale for the measurement items.

#### DATA COLLECTION PROCEDURE

Once the construction companies were identified, the managing directors or executive directors of each company were contacted to answer the questionnaire. Questionnaires were distributed via email. In the email, each respondent received appropriate guidance on the purpose of the study and were assured of confidentiality and anonymity. The respondents were given two weeks to complete the questionnaires. After two weeks, 200 responses (73.5%) were collected. In terms of ownership, the construction companies that participated in this study included 69% Malaysian, 9.5% foreign, and 21.5% Malaysian-foreign companies. More than half (58%) the construction companies were managed by professional management groups, while the remaining 42% were run by business owners. A majority of 48% construction companies had been in the industry for more than 10 years, whereas 35.5% had been part of the industry for less than 10 years.

#### DATA ANALYSIS

To analyze the data, this study performed partial least squares structural equation modeling (PLS-SEM) using

the SmartPLS 3.2.7 software. PLS-SEM was deemed the appropriate analysis method because this study’s research model included formative items (i.e., OEC and CEC), as per the suggestion of Hair et al. (2014). The analysis was conducted following the two-stage PLS-SEM approach, namely the measurement model and the structural model (Hair et al. 2017).

## RESULTS

### REFLECTIVE MEASUREMENT MODEL

The measurement model determines the validity and reliability of the items through item loadings, composite reliability (CR), average variance extracted (AVE), and Heterotrait-Monotrait ratio (HTMT). Table 1 reports the item loadings, CR, and AVE findings of this study. As shown in Table 1, all item loadings were higher than 0.7 (Hair et al. 2017), while CR values were greater than the acceptable value of 0.7 (Bagozzi & Yi 1988). Thus, the model’s internal consistency reliability was confirmed. Likewise, all AVE values exceeded the required minimum value of 0.5 (Bagozzi & Yi 1988), verifying the convergent validity of the data. To determine discriminant validity, the  $HTMT_{0.90}$  criterion was applied. As displayed in Table 2, HTMT values were all below the  $HTMT_{0.90}$  threshold. In short, the validity and reliability of the reflective measurement model was well-established.

TABLE 1. Measurement model results of first-order reflective constructs

First-order reflective constructs	Items	Loadings	CR	AVE
Egoism	E1	0.829	0.873	0.633
	E2	0.787		
	E3	0.810		
	E4	0.753		
Benevolence	B1	†	0.838	0.632
	B2	0.799		
	B3	0.799		
	B4	0.787		
Principled	P1	0.775	0.861	0.609
	P2	0.783		
	P3	0.810		
	P4	0.752		
IEO	IEO1	0.833	0.901	0.694
	IEO2	0.860		
	IEO3	0.843		
	IEO4	0.795		

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EEO	EEO1	†	0.889	0.798
	EEO2	0.877		
	EEO3	0.909		
	EEO4	†		
CSF	CSF1	0.791	0.889	0.615
	CSF2	0.739		
	CSF3	0.805		
	CSF4	0.780		
	CSF5	0.803		
FSF	FSF1	0.809	0.882	0.713
	FSF2	0.884		
	FSF3	0.838		

Note: †=items dropped

TABLE 2. HTMT results of first-order constructs

	Benevolence	CSF	EEO	Egoism	FSF	IEO
CSF	0.546					
EEO	0.317	0.814				
Egoism	0.457	0.465	0.460			
FSF	0.476	0.900	0.751	0.485		
IEO	0.496	0.765	0.763	0.359	0.781	
Principled	0.746	0.525	0.306	0.288	0.442	0.311

Note: HTMT<sub>0.90</sub> criteria

## FORMATIVE MEASUREMENT MODEL

The formative measurement model was checked via Variance Inflation Factor (VIF) values and the significance of item weights (Hair et al. 2017). As portrayed in Table 3, VIF values were all below 5.0; thus,

there were no collinearity issues in the items. However, item weights were insignificant at  $p < 0.005$ . Despite this result, the items were considered for further analysis as their loadings were greater than the threshold value of 0.50 (Hair et al. 2017).

TABLE 3. Results of first-order formative constructs' VIF, *t* values and outer loadings

First order formative constructs	Items	VIF	<i>t</i> Values (outer loadings)
Ability	A1	1.837	1.142(0.688)
	A2	2.088	0.114(0.662)
	A3	1.556	2.335(0.628)
	A4	1.733	1.632(0.722)
	A5	1.639	3.134(0.797)
	A6	1.729	2.616(0.787)
	A7	1.679	0.799(0.668)
Motivation	M1	1.800	0.494(0.677)
	M2	1.627	1.825(0.695)
	M3	1.645	1.392(0.720)
	M4	1.451	5.39(0.907)

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Opportunity	O1	1.598	3.27 (0.764)
	O2	1.778	3.684(0.813)
	O3	1.523	1.934(0.657)
	O4	1.748	0.568(0.678)
	O5	1.611	1.160(0.660)
	O6	1.811	2.383(0.748)
	O7	1.540	1.692(0.621)

\*t value>1.96= significance at p<0.05

STRUCTURAL MODEL

The structural model was constructed to determine the coefficient of determination (R<sup>2</sup>), effect size (*f*<sup>2</sup>), predictive relevance (Q<sup>2</sup>), and hypothesis testing results (Hair et al. 2017). The larger the R<sup>2</sup>, the more the variance of the dependent variable is explained by its independent variables (Hair et al. 2017). In this study, 53.6% of the variance in OEC was explained by AMO-enhancing HRM practices, while 60.5% of the variance in CEC was explained by OEC and the three AMO-enhancing HRM practices. The *f*<sup>2</sup> values identify the impact of independent variables on the dependent variables (Hair et al. 2017). When *f*<sup>2</sup> is 0.02, the effect is small, while 0.15 represents a medium effect and 0.35 represents a large effect (Cohen 1988). The results showed that ability- enhancing HRM practices had a large effect of 0.036 and opportunity-enhancing HRM practices had a medium effect of 0.274 on OEC. Motivation-enhancing HRM practices (*f*<sup>2</sup>= 0.001) only had a small effect on OEC. In addition, ability-enhancing (*f*<sup>2</sup>= 0.104) and opportunity-enhancing (*f*<sup>2</sup>= 0.161) HRM practices had medium effects on CEC. On the other hand, motivation-

enhancing (*f*<sup>2</sup>= 0.001) HRM practices only had a small effect on CEC.

The Q<sup>2</sup> results were greater than zero at 0.324 and 0.295, demonstrating that the research model had predictive relevance. Table 4 presents the hypothesis testing results. As predicted, ability-enhancing (β=0.347, p<0.05) and opportunity-enhancing (β=0.432, p<0.05) HRM practices were found to have significant effects on CEC. Therefore, H1a and H1c were supported. Conversely, motivation-enhancing HRM practices showed an insignificant influence on CEC (β=0.020, p<0.05); thus, H1b was not supported. Likewise, ability-enhancing (β=0.217, p<0.05) and opportunity-enhancing (β=0.542, p<0.05) HRM practices exhibited significant relationships with OEC, thereby supporting H2a and H2c. However, the effect of motivation-enhancing HRM practices on OEC was found to be insignificant (β=0.023, p<0.05), rejecting H2b. Additionally, OEC demonstrated an insignificant relationship with CEC (β =0.052, p<0.05), meaning H3 was not supported. Finally, OEC failed to mediate the effects of all three AMO-enhancing HRM practices on CEC, as the confidence intervals straddled zero. Hence, H4a, H4b and H4c were not supported.

TABLE 4. Hypothesis testing results

Hypothesis	Relationship	Standard Beta	Standard Error	t Values	Decisions
H1a	Ability-CEC	0.347	0.102	3.412*	Supported
H1b	Motivation-CEC	0.020	0.082	0.243	Not supported
H1c	Opportunity-CEC	0.432	0.009	4.341*	Supported
H2a	Ability-OEC	0.219	0.085	2.570*	Supported
H2b	Motivation-OEC	0.023	0.089	0.264	Not supported
H2c	Opportunity-OEC	0.540	0.078	6.922*	Supported
H3	OEC-CEC	0.052	0.099	0.528	Not supported

Note: \*t value>1.96 reflects significance at p<0.05

TABLE 5. Mediation analysis results

Hypothesis	Relationship	Indirect effect	t Values	Percentile bootstrap 95% confidence interval		Decision
H4a	Ability-OEC-CEC	0.011	0.465	-0.035	0.064	Not supported
H4b	Motivation-OEC-CEC	0.001	0.110	-0.014	0.033	Not supported
H4c	Opportunity-OEC-CEC	0.028	0.529	-0.091	0.121	Not Supported

Note: \*t value>1.96 reflects significance at p<0.05



## DISCUSSION

This study explains the effect of an organization's AMO-enhancing HRM practices on its environmental citizenship via the mediating role of its ethical climate. The results show that ability-enhancing HRM practices significantly affect CEC, which is consistent with prior studies (Masri & Jaaron 2017; Tang et al. 2018). A plausible explanation for this is that the construction companies in this study have utilized training and development (i.e., ability-enhancing HRM practices) to influence CEC. Through environmental training and development, employees become aware of the importance of environmental protection and are likely to develop a proactive attitude when dealing with environmental issues. Likewise, opportunity-enhancing HRM has a significant positive relationship with CEC, suggesting that the construction companies often involve their employees in environmental practices. For instance, construction companies may engage employees in environmental events such as 'Environment Day' where employees visit forests to appreciate nature. This increases employees' environmental responsibility, which in turn contributes to CEC. The result is similar to that of past studies (Srivastava & Shree 2019; Schall et al. 2016). On the contrary, motivation-enhancing HRM was found to have an insignificant effect on CEC even though previous studies (Bangsal & Tiwari 2015; Schall & Mohnen 2015) have indicated the opposite. The reason for this could be that the construction companies in this study do not use rewards extensively in encouraging employees to contribute to CEC. Further illustrating this point, the construction companies' responses to environmental rewards items were below average in this study. This is supported by Guerci et al. (2013), who argued that rewarding people financially does not necessarily make them change and engage in good behaviors (e.g., CEC).

Ability-enhancing HRM practices were found to significantly enhance the OEC of the construction companies in this study, suggesting that these companies use recruitment and selection to achieve OEC. Specifically, they may hire and choose candidates based on ethical values. If selected, the candidates are likely to demonstrate ethical behaviors and foster OEC. A similar finding was reported by Guerci et al. (2013) and Einarsen et al. (2019). Consistent with the finding of Guerci et al. (2013), opportunity-enhancing HRM also showed a significant positive relationship with OEC, implying that the construction companies provide opportunities for their employees to engage in ethical behaviors. This includes the aforementioned 'Environment Day' and switching off the lights during lunch hours, which results in environmental awareness and subsequently, company-wide OEC.

However, motivation-enhancing HRM practices appear to have no influence on the OEC of construction

companies, contradicting the findings of Guerci et al. (2013). Construction companies do not depend on rewards in encouraging their employees to follow ethical values. In fact, it was found that most of the construction companies in this study reported very low mean scores for ethics reinforcement using rewards. Thus, rewards do not guarantee employees' environmental awareness, leading to the insignificant relationship between motivation-enhancing HRM practices and OEC.

Moreover, OEC exhibited no influence on CEC, although previous studies (Li Ye et al. 2019; Wang 2019) have revealed the opposite. A possible reason for this finding could be that construction companies seek the early completion of their construction projects (Aziz & Abdul-Hakam 2016). More often than not, clients are only interested in getting a project completed because project delays pose potential losses for all stakeholders (Zhang et al. 2015). In view of this, incorporating environmental elements might be significantly time-consuming because of the extra efforts it takes (Varnas et al. 2009). Therefore, employees may perceive that their companies disregard environmental protection, rendering them less environmentally concerned as well.

Furthermore, OEC failed to mediate the effects of all three AMO-enhancing HRM practices on CEC, despite Chou's (2014) suggestion that organizational climate (e.g., OEC) could influence HRM practices. This may be because Chou's (2014) sample was eco-initiative hotels in Taiwan, which have reached higher levels of environmental commitment by developing policies to address environmental concerns. In contrast, this study's sample was the Malaysian construction industry, which has a lower level of environmental awareness because the implementation of environmental policy is voluntary in Malaysia. For example, 73.2% of the construction companies in this study reported that they had no ISO 14001: Environmental Management System. This limits OEC from translating AMO-enhancing HRM practices into CEC in construction companies.

## RESEARCH IMPLICATIONS

### THEORETICAL IMPLICATIONS

This study significantly advances the RBV and the AMO theory by identifying and explaining what contributes to OEC and CEC. The results confirm that ability and opportunity-enhancing HRM practices are special organizational resources that should be used to enhance CEC. This is because these practices grant employees the knowledge and platforms necessary to assess the impact of their work on the environment. In this sense, the findings provide a foundation for future studies to better understand how ability and opportunity-enhancing HRM practices relate to CEC. Similarly, by applying the RBV to understand the link between AMO-enhancing HRM practices and OEC, it was revealed that ability

and opportunity-enhancing HRM practices are critical resources that competitors find difficult to imitate and should thus be appreciated. In other words, this study improves the conceptual understanding of why ability and opportunity-enhancing HRM practices have value as organizational resources that improve OEC. On the other hand, this study opposes the RBV and the AMO theory in terms of the insignificant relationship between motivation-enhancing HRM practices, OEC and CEC. This finding warrants further studies to confirm whether the relationship exists in other contexts. In a similar vein, this study contradicts the RBV theory as it supports neither the effect of motivation-enhancing HRM practices on OEC nor the direct and mediating effects of OEC on CEC. Further investigation is required to clarify these contradicting results and provide new insights to enrich the literature on OEC and CEC.

#### PRACTICAL IMPLICATIONS

On a practical level, this study demonstrates that ability and opportunity-enhancing HRM practices are crucial for better CEC. HR managers can therefore encourage their employees to implement environmental activities by communicating the values and benefits of CEC. This study also reminds construction companies to omit motivation-enhancing HRM practices and OEC if they face budgetary constraints in enhancing CEC. Construction companies should instead allocate more funds to ability and opportunity-enhancing HRM practices to pursue CEC. Additionally, the present study informs construction companies to promote OEC through ability and opportunity-enhancing HRM practices instead of motivation-enhancing HRM practices. In particular, organizations can recruit and select candidates who share the ethical values of the organization to develop OEC. Alternatively, organizations can encourage employees to share ethical ideas and inspire employees to follow established codes of ethics to promote OEC. Moreover, this study assists construction companies in recognising the ineffectiveness of OEC in achieving CEC. Hence, construction companies should hire an environmental representative to monitor the implementation of environmental elements and guide their partners (e.g., sub-contractors) towards environmental improvement. For example, the environmental representative can work with building designers to ensure an energy-efficient design is implemented. By practising this, firms' stakeholders will share a similar goal towards environmental protection and thus achieve CEC. Lastly, this study is useful for Malaysian policy makers in creating environmental strategies and policies that provide clear directions for the construction industry to achieve CEC. In line with this, Malaysian policy makers may offer extra environmental training and involvement to motivate the construction industry to use ability and opportunity-enhancing HRM practices.

#### CONCLUSION

Recently, organizations have become more concerned about CEC as people are more conscious of how businesses contribute to environmental pollution. Human aspects, especially excitement, willingness, and commitment are essential for the effective implementation of CEC. Therefore, AMO-enhancing HRM practices is the enabler to create CEC. The study seeks to assess the relationship between AMO-enhancing HRM practices, CEC and the mediating effect between both. The study confirms that ability and opportunity-enhancing HRM practices influence CEC while motivation-enhancing HRM practices do not influence CEC. Adding on, the current study also highlights that OEC has no mediating effect on AMO-enhancing HRM practices and CEC. Theoretically, the study enriches future studies to better understand how ability and opportunity-enhancing HRM practices relate to CEC. Besides, this study contradicts the AMO and the RBV theory due to the insignificant relationship between motivation-enhancing HRM practices, OEC and CEC. Practically, construction companies should invest heavily in ability and opportunity-enhancing HRM practices to pursue CEC. Instead, construction companies can abandon motivation-enhancing HRM practices and OEC if they have limited funds to improve CEC. This study is not without limitations. First, the sample was drawn from construction companies in Malaysia and measured by tender capacity, revenue, and level of environmental awareness. This gives rise to the caveat that the results may only be limited to Malaysian construction companies, as organizations in other countries could interpret CEC differently. In fact, factors such as cultural values and environmental awareness may cause various differences across countries and geographical regions. Therefore, future studies can account for the role of countries and geographical regions in the relationships studied. Second, this was a cross-sectional study, meaning that our results only represent static relationships between CEC, AMO-enhancing HRM practices, and OEC. It will be useful if future studies are to perform longitudinal analysis to observe the changes in organizations' CEC, AMO-enhancing HRM practices, and OEC over time. Third, the findings were based on organizations' CEC as a product of their HRM practices and organizational climate. Nevertheless, there is a possibility that organizations have different competencies and features which might draw different result. Future studies should therefore examine the impact of different organizational competencies and features on CEC.

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