

Elucidating the Bonds between Organizational Ethical Climate and Corporate Environmental Citizenship

(Penjelasan Hubungan antara Iklim Etika Organisasi dan Kewarganegaraan Alam Sekitar Korporat)

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ABSTRACT

The aim of this paper is to examine the relationship between organizational ethical climate and corporate environmental citizenship. Drawing upon Resource-Based View (RBV) theory, this study develops a research framework to explain the relationship between organizational ethical climate and corporate environmental citizenship. A quantitative approach was employed to test the relationship between organizational ethical climate and corporate environmental citizenship. Grade 7 construction companies were selected as the target respondents. Systematic sampling technique was used to ensure that every member of the sampled population has equal chances of being selected as a respondent. However, self-administered questionnaires were used to collect data. The findings showed that organizational ethical climate is significantly related to corporate environmental citizenship. It also showed that if the construction companies wish to optimize corporate environmental citizenship, they need to prioritize organizational ethical climate. In addition, discussion, implications, directions for future research, and conclusion of the study were also highlighted.

Keywords: Organizational ethical climate; corporate environmental citizenship

ABSTRAK

Tujuan kertas ini adalah untuk mengkaji hubungan antara iklim etika organisasi dan kewarganegaraan alam sekitar korporat. Berdasarkan Resource Based View (RBV) teori, kajian ini membangunkan rangka penyelidikan untuk menjelaskan hubungan antara iklim etika organisasi dan kewarganegaraan alam sekitar korporat. Pendekatan kuantitatif digunakan untuk menguji hubungan antara iklim etika organisasi dan kewarganegaraan alam sekitar korporat. Syarikat pembinaan Gred 7 dipilih sebagai responden. Teknik pensampelan sistematik digunakan untuk memastikan setiap responden mempunyai peluang yang sama untuk dipilih sebagai responden. Kemudian, soal selidik yang dijalankan sendiri digunakan untuk mengumpulkan data. Penemuan menunjukkan iklim etika organisasi berkaitan dengan kewarganegaraan alam sekitar korporat. Ini menunjukkan bahawa jika syarikat pembinaan ingin mengoptimumkan kewarganegaraan alam sekitar korporat, mereka perlu mengutamakan iklim etika organisasi. Di samping itu, perbincangan, implikasi, arahan untuk penyelidikan masa depan, dan kesimpulan kajian juga turut diserlahkan.

Kata kunci: Iklim etika organisasi; kewarganegaraan alam sekitar korporat.

INTRODUCTION

Malaysia has reported positive economic growth through industrialization, agriculture, tourism and export activities (Kazi, Rawshan & Sharifah 2015; Tang & Tan 2015). This positive economic growth has also contributed to the rapidly growing rate of environmental pollution. Air pollution in Malaysia, for instance, has increased by 20% from 2010 to 2014 (Compendium of Environment Statistics 2015). The continuous increase in environmental pollution has produced many negative effects (Gunther & Hellman 2017). One of the obvious negative effects is global warming, which is a result of the increase in carbon dioxide emissions (Anderson, Hawkins & Jones 2016). Global warming changes the climate and sea levels. For instance, the extreme heat of global warming causes warmer climate in many areas and ultimately result in

drought. In terms of health and well-being, environmental pollution has been linked to various types of diseases (Attademo et al. 2016). Air pollution, for example, is one of the major causes of lung cancer.

In line with the above illustration, several business organizations have been accused of contributing to environmental pollution because most business (industrial) activities not only produce a large amount of waste but also release a large quantity of carbon dioxide during the production process. As an example, the two main contributors to air pollution in Malaysia from 2010 to 2014 are industrial and power plants (Compendium of Environment Statistics 2015). Besides, existing literature (e.g., Hassan & Kouhy 2015; O'Donohue & Torugsa 2015) confirmed that business organizations are strongly associated with environmental pollution. Thus, it is paramount for various organizations to practice corporate environmental citizenship in order to protect the natural

environment. Corporate environmental citizenship is, therefore, defined as the extent to which organizations voluntarily involve in environmental initiatives. Corporate environmental citizenship helps the organization to gain better financial performance by means of reducing operating costs and becoming more efficient in operation as highlighted by Song, Zhao and Zheng (2016), Feng et al. (2016), and Disegni, Huly and Akron (2015).

This is done by developing organizational rare, valuable, difficult to imitate and substitute resources (e.g., environmental technologies, employees' environmental awareness), in order to generate reasonable advantages over competitors. It implies that if business organizations do not emphasize corporate environmental citizenship, they cannot out-weigh competitors that offer lower prices. At the same time, the government has introduced various environmental policies (e.g., green technology policy, national policy on the environment) to urge business organizations to practice corporate environmental citizenship. Nevertheless, the problem of how well the organizations achieve corporate environmental citizenship is still unclear. This is because most of these organizations do not implement it, though they agree to, and understand the meaning of corporate environmental citizenship (Nazirah 2010). Thus, it is crucial to study corporate environmental citizenship. Findings from this study can provide interesting insights into enhancing the environmental awareness of business organizations.

Moreover, only a little attention has been specifically paid to important organizational level factors (e.g., organizational ethical climate, organizational competencies) while influencing corporate environmental citizenship. This is because previous environmental studies (e.g. Chan et al. 2014; Chou 2014; Papagiannakis & Lioukas 2012) mainly focused on individual levels factor such as employees' personal values and norms. Furthermore, a handful of previous literature laid emphasis on institutional level factors such as stakeholder pressures (e.g., Liu et al. 2016; Vilchez, Darnall & Correa 2017) and regulatory compliances (e.g., Li et al. 2017; Lopez, Sakhel & Busch 2016). Therefore, in order to bridge these gaps, organizational ethical climate has to be introduced. Organizational ethical climate plays an important role in influencing environment related studies (Matinaro & Liu 2017). Organizational ethical climate is portrayed by organizational policies and rules meant to guide the organization, giving it a sense of direction. Schultz, Mattor and Moseley (2016), argued that organizational policies (e.g., organizational ethical climate) can be employed to support organizational change (e.g., corporate environmental citizenship) when the members understand the organization's policies. Therefore, members will be clear about their roles and responsibilities towards the achievement of corporate environmental citizenship.

Besides, organizational ethical climate also motivates the organization to enhance corporate environmental citizenship because it decides the way employees within the organization interact with each other. In brief,

organizational ethical climate is the important factor when looking into corporate environmental citizenship. Thus, the current study aims to examine the effect of organizational ethical climate on corporate environmental citizenship. By doing so, this study differs from previous studies (e.g., Lopez et al. 2016; Vilchez et al. 2017), in paving the way to understanding how organizational ethical climate could be a potential source of corporate environmental citizenship. Equally, this study extends the Resource-Based View (RBV) theory by supporting the argument that organizational ethical climate is a valuable, rare, inimitable and non-substitute organizational resource, that can create value for the organizations. The subsequent sections review existing literature and describe the methodology which consists of sample and measurements; which is followed by results, discussions and research implications; whereas, limitations of the study and directions for future research conclude the study.

LITERATURE REVIEW

DEFINITIONS OF CORPORATE ENVIRONMENTAL CITIZENSHIP

Numerous studies have been conducted to define and describe corporate environmental citizenship. First, Kusku (2007) refers to corporate environmental citizenship as the organizational precautions and policies set by the organization to reduce their environmental hazards. Second, Rondinelli and Berry (2000), defined it in a different way; which is that organizational systems and processes (e.g., integrates environmental issues into the strategic planning process, recycling policies at the workplace) that improve environmental conditions. Third, Banerjee (2002) expressed corporate environmental citizenship as the organization-wide recognition of the importance of the biophysical environment in the formulation of organization strategy and the integration of environmental issues into the strategic planning processes. However, this study conceptualizes corporate environmental citizenship as the extent to which organizations voluntarily involve in environmental initiatives. This study adapts four dimensions of corporate environmental citizenship namely internal environmental orientation, external environmental orientation, corporate strategic focus and functional strategic focus as identified by Banerjee (2002). It is widely used in corporate environmental studies (e.g., Chan 2010; Shah 2011).

Internal environmental orientation means the organizations' internally focused environmental responsibility such as internal corporation values, ethical behavior standards, commitment to environmental protection and environmental mission statements (Banerjee 2002). For example, Gamuda Berhad, a Malaysian engineering and infrastructure based company, highlighted its concern for the natural environment in its mission statement. On the other hand, external

environmental orientation refers to the organizations' externally focused environmental responsibility (Banerjee 2002). For instance, an organization that offers support for local, non-profit waste recycling programs. In the same way, corporate strategic focus refers to an organizations' level of integration of environmental issues into its strategic planning process (Banerjee 2002). For instance, a construction company that embarks on research and development (R&D) investment, specifically on waste reduction technologies for construction sites. Functional strategic focus is defined as an organizations' functional approach to environmental issues such as emission reduction and waste management (Banerjee 2002). As an example, an organization that organizes environmental training twice in a month in order to enhance employees' environmental awareness.

DEFINITIONS OF ORGANIZATIONAL ETHICAL CLIMATE

Various authors have provided various definitions of organizational ethical climate. Each of the definitions will be reviewed briefly before beginning the definition chosen for this study. Schneider (1983) refers organizational ethical climate as organizational beliefs and values in shaping and guiding organizational members' behavior. Victor and Cullen (1988) defined organizational ethical climate as the organizational practices and procedures that have ethical content. Similarly, Babin, Griffin and Boles (2004) indicated that organizational ethical climate is the provision for rightness and wrongness in the organization by establishing the norms for acceptable and unacceptable behavior within the organization. Similarly, Weber and Geder (2011) described organizational ethical climate as a component of an organizational culture that influences organizational members on how to act appropriately. Following the previous discussions, the definition of Victor and Cullen's organizational ethical climate laid the foundation for this study. This study adopts the three dimensions of organizational ethical climate namely egotism, benevolence and principle; because it was widely used by previous researchers (e.g., Parboteeah & Kapp 2008; Parboteeah et al. 2010).

Egotism simply refers to the organizations self-seeking, a profit-oriented aspect that guides the organizations' behavior (Victor & Cullen 1988). For example, a factory releases a harmful toxin into the air during the production process without consideration for dwellers and settlers within the vicinity (e.g., the general public and its employees as well). The unethical and immoral business behavior of the organization, which is due to gross self-interest in maximizing profit. Furthermore, a benevolent climate refers to considerations for the well-being of others, which acts as a guide to the organizations' behavior (Victor & Cullen 1988). For example, an organization that expresses concerns about protecting the natural environment by offering environmental education

programs to create awareness among its members, in pursuing green behavior. Moreover, principled climate refers to organizational rules, procedures and codes of conduct that guide the organizations' behavior (Victor & Cullen 1988). For examples, the organizations referred to as 'green organization' who implement various recycling procedures in order to guide employees within the organization to become more environmentally friendly.

ORGANIZATIONAL ETHICAL CLIMATE AND CORPORATE ENVIRONMENTAL CITIZENSHIP

Prior literature has mentioned the relationship between organizational ethical climate and corporate environmental citizenship. For example, Linnenluecke and Griffiths (2010) proposed the relationship between organizational ethical climate and corporate environmental citizenship. Organizational ethical climate influences corporate environmental sustainability by emphasizing the efficiency values (i.e elimination of waste and redundancy) in the operation process. For example, a company incorporates reduction in energy and waste values into ethical standards in order to inculcate into the employees, values such as switching off the lights during low occupancy, switching off the computer before leaving the office as well as paper recycling. These kinds of energy and waste reduction actions will increase corporate environmental citizenship.

Besides, Neto and Jabbour (2010) in their study, highlighted that organizational ethical climate, plays an important role in implementing proactive environmental strategy, in order to prevent investments towards proactive environmental strategy lose their value. Rotherberg (2003) agreed by revealing that organizational ethical climate has been identified as a major factor that determines an organizations' participation in projects of environmental management improvement, such as cleaner production in the organization. Organizational ethical climate influences corporate environmental citizenship through the incorporation of the organizations' environmental values, belief and assumptions. For example, an organization that has core values that emphasize on protecting the natural environment. These core values enhance ethical climate, help to preserve the natural environment and directly enhance corporate environmental citizenship.

Rivera-Camino (2012) found that corporate environmental citizenship is determined by organizational ethical judgments and perception (e.g., organizational ethical climate), which are reflected in organizational policy, vision and mission statement. The organizational policy, vision and mission statement will influence the actions and behavior of the employees within the organization. It means the organizations are more likely to engage in corporate environmental behavior if they are guided by organizational environmental policy, vision and mission statement. For example, an organization that has an environmental policy, vision and mission will motivate

its members to make decisions focused on the natural environment. Therefore, such organization is less likely to pollute or use toxins in its production process and increase environmental citizenship.

Moreover, Chen and Chang (2013) indicated that organizational ethical climate positively influences an organization's green innovation performance. They argued that organizational ethical climate will influence the employees' commitment to the organization to generate a creative and innovative idea for producing new green products and processes. Therefore, if the organization wants to develop green innovation performance, it should enhance its organizational ethical climate. For example, the employees within an organization may create innovative solutions to decrease waste and pollution because they are highly influenced by the corporation's ethical values to protect the environment.

In addition, Lee et al. (2014) demonstrated that laid down code of ethics (e.g., organizational ethical climate) affects corporate philanthropy (e.g., corporate environmental citizenship). Code of ethics is reflected in the organizations' ethical values and norms in influencing the organizational ethical behavior. Therefore, an effective code of ethics improves an organizations' ethical climate, and the organization can respond better to corporate philanthropy. For example, an organization has the code of environmental ethics that guide the organizational members on the "do" and "don't" of the natural environment. As a result, it increases organizational ethical climate and, consequently, corporate environmental citizenship.

Furthermore, Bansal and Roth (2000) found that ethical climate acts as a trigger for corporate environmental practices because it motivates the employees within the organization to respond to ecology issues. Organizational values (e.g., universalism, respect, understanding and concern for the natural environment; self-transcendence, i.e. care for the environment and promoting ecological balance) as an important tool of ethical climate, influences corporate environmental practices because it will enable as well as guide the members of the organization to champion ecological responses. Therefore, the members are likely to respond to environmental issues when they are influenced by an organizational ethical climate that is reflected in the organizational values.

Meanwhile, Baker, Hunt and Andrews (2006) also examined the impact of organizational ethical values (e.g., organizational ethical climate) on organizational citizenship behaviors (e.g., organizational environmental behavior). Organizational ethical values displayed through organizational systems, policies and codes of conduct, will influence the members of the organization to follow. For example, an organization that upholds ethical values by rewarding ethical behavior and punishing unethical behavior in order to enhance organizational citizenship behaviors. Organizational ethical values are a means of influencing employee' behavior within an organization, in order to shape their behavior, making it consistent with the organization's ethical values.

Based on above discussion, it is hypothesized that:

H₁ Organizational ethical climate have relationship with the corporate environmental citizenship.



FIGURE 1. Research framework

Figure 1, indicates that the research framework of the current study which explains organizational ethical climate has a direct relationship with corporate environmental citizenship. Resource Based View (RBV) theory was selected to explain the research framework as suggested in previous studies (e.g., Gallego-Alvarez, Prado-Lorenzo & Garcia-Sanchez 2011; Hart 1995; Rabiah & Azizah 2013; Russo & Fouts 1997; Sharma & Vredenburg 1998).

The Resource-Based View (RBV) theory claims that when the resources are classified as valuable, rare, inimitable and non-substitutable, the resources enable the organization to gain competitive advantage. Despite the fact that the Resource-Based View (RBV) theory has no managerial implication (Connor 2002), it does not only tell organizations to develop valuable, rare, inimitable and non-substitute resources, but provides a little guidance on how it should be done (Miller 2003). It exaggerates the extent to which organizations can control resources as well as the capabilities of gaining competitive advantages (McGuinness & Morgan 2000). In this study, organizational ethical climate is one of the useful resources that need to be possessed by organizations to compete in the market under the Resource-Based View (RBV) theory when it fulfils the resources requirements specified by Barney (1991).

Organizational ethical climate is valuable because, in a strong organizational ethical climate, the organization can achieve sustained competitive advantages worth millions of dollar (Barney 1991). Furthermore, organizational ethical climate is rare and difficult to substitute since it is developed within the culture of the organization. As a result, it cannot be sold in the marketplace. Besides, due to the fact that organizational ethical climate is difficult to duplicate in the short times, it is, therefore, hard to imitate by competitors. Manroop (2015), Branco and Rodrigues (2006) and Barney (1991) argued that organizational ethical climate is recognized as the resources required to gain competitive advantages. In short, organizational ethical climate is more likely to be one of the important resources of the organization to achieve competitive advantages which will translate into corporate environmental citizenship.

RESEARCH METHODOLOGY

RESEARCH DESIGN

This study adopts quantitative research methodology. Quantitative research methodology explains and predicts

on relationship within variables (i.e organizational ethical climate and corporate environmental citizenship) (Leedy 1993). In order to collect data, a questionnaire was employed because it is an easier way to obtain data from a large number of targeted respondents as suggested by Sekaran and Bougie (2016). The respondents comprised of the representative (i.e managing director or human resource manager) of each participating construction companies in Malaysia. Moreover, this study chose the organizational level as the unit of analysis because it examines corporate environmental citizenship of construction companies in Malaysia.

SAMPLE

1045 Grade 7 construction companies in Malaysia were used as the population of this study. Grade 7 construction companies are large construction companies engaged in heavy and complex construction companies with no limit of tender capacity. The list of construction companies was obtained from a directory published by the Construction Industry Development Board (CIDB) in 2016, which is the latest list of construction companies in Malaysia. Grade 7 construction companies have a higher level

of environmental awareness, knowledge and practices compared to other grades (e.g., Grade 1 and Grade 2) of construction companies (Nazirah 2010). It is believed that they are more familiar with the environmental practices in construction activities. G*Power 3.1.9.2 was used to analyze the sample size with a significance level of 0.05 and a power of 0.95. According to Faul et al. (2007), it is a useful software for statistical tests (e.g., calculate sample size), commonly used in social and behavioral research. It was done by running priori power analysis using medium effect size.

Hence, the sample size for this study is 89. According to Roscoe (1975), sample size larger than 30 and less than 500 are suitable for most research. Besides, a systematic sampling technique was used to select the study sample, because it ensures that the population will be evenly sampled (Sekaran & Bougie 2016). Thus, the construction companies numbered 12, 24, 36 and 48 were selected until 89 construction companies were obtained (i.e 1045/89). However, out of the total sample of 89, only 50 responses (60%) were collected. The response rate is relatively better than previous studies. Chen and Chang (2013) obtained 35.3% whereas Chou (2014) has 50.1% response rate. Table 1 summarizes the profile of the construction companies Malaysia.

TABLE 1. Construction companies' profile

	Demographic Profile	Frequency	Percentage (%)
Ownership	Malaysian	48	96
	Foreign	1	2
	Both	1	2
Management Company	Professional Management Group	26	52
	Owner	24	48
Year of Establishment	Less than 10 years	21	42
	More than 10 years	29	58
Target Market	Domestic	36	72
	International	3	6
	Both	11	22

MEASUREMENTS

In order to access organizational ethical climate, measurements of Cullen, Victor and Bronson (1993) were adopted. It has been validated and replicated by many researchers (e.g Parboteeah et al. 2010; Parboteeah & Kapp 2008). The 12 items under the organizational ethical climate section of the questionnaire measured egoist-local, benevolent-local, and principal-local ethical climates of the organizations. The 12 organizational ethical climate items were rated using a five point Likert scale, ranging from 1 (mostly false) to 5 (completely true).

Measurements for corporate environmental citizenship were derived from Banerjee (2002). This measurement was selected because it was often utilized by previous researchers (e.g., Buil-Carrasco, Fraj-Andres & Matute-Vallejo 2008; Chan 2010; Shah 2011). The 16 items

under the corporate environmental citizenship section of the questionnaire measured internal environmental orientation, external environmental orientation, corporate strategic focus and functional strategic focus. A five-point Likert scale, where 1 corresponds to 'mostly false' and 5 to 'completely true' was adopted for all the 16 items pertaining to corporate environmental citizenship.

RESULTS

A Two-stage approach of Partial Least Square Structural Equation Modeling (PLS-SEM) was used to analyze the data through SmartPLS 3.2.6 software. It suits the needs of this study for analyzing higher order research models (Becker, Klein & Wetzels 2012). Higher order research models in the current study have two levels namely

first-order and second-order constructs. For instance, egotism, benevolence, principle, internal environmental orientation, external environmental orientation, corporate strategic focus and functional strategic focus are first-order constructs, while organizational ethical climate and corporate environmental citizenship are second-order constructs. Furthermore, all the first-order constructs are reflective constructs because they are represented by their own items.

For instance, item one (decisions in this organization are primarily viewed in terms of contribution to profit) and two (employees are expected to do anything to further the organizations' interests), are a manifestation of the egotism first-order constructs. These items are interchangeable within their corresponding constructs as they come from the same constructs. On the other hand, second-order constructs are formative constructs when they are formed by the first order constructs. For example, internal environmental orientation, external environmental orientation, corporate strategic focus and functional strategic focus independently form the meaning of corporate environmental citizenship because they are different from each other. Changing any one of the first-order constructs substantially changes the meaning of corporate environmental citizenship.

Another essential point, which is the common method variance, was examined because this study used self-reported questionnaires to collect data. Self-reported questionnaires create a single source bias, which threatens the validity of the data (Burton-Jones 2009). In order to solve common method variance, Harman's single factor test was utilized (Reio 2010). This is done by entering all the variables of the study into exploratory factor analysis and examined unrotated factor solutions to determine the number of factors to account for the variance among the variables (Andersson & Bateman 1997; Aulakh & Gencturk 2000).

If a single factor accounts for the majority of the covariance among the measures, then it is concluded that common method variance is present (Podsakoff et al. 2003). The results revealed that the extraction of the first factor explains 39.507% of the variance, which is less than the 50% cut off value. Thus, common method variance was not the problem in this study. After that, measurement and structural model was examined. Measurement model was used to examine the reliability and validity of the items, whereas the structural model was used to access the relationship between the constructs (Hair et al. 2017).

ASSESSMENT OF FIRST-ORDER REFLECTIVE MEASUREMENT MODEL

Under the first-order reflective constructs measurement model, two types of validity namely 'convergent validity' and 'discriminant validity' were accessed. Convergent validity refers the degree to which the items measured in the same constructs are in agreement (Hair et al. 2017).

While discriminant validity means the degree to which constructs are different from other constructs (Hair et al. 2017). In order to determine the convergent validity, item loadings, composite reliability (CR), average variance extracted (AVE) were utilized.

As shown in Table 2, all the item loadings are above the cut off value of 0.7 as recommended by Hair et al. (2017). On the other hand, all the composite reliability (CR) were greater than the threshold value of 0.7, whereas average variance extracted (AVE) exceeded a minimum value of 0.5 (Bagozzi & Yi 1988). In brief, convergent validity was achieved. Besides, in order to confirm discriminant validity, Heterotrait-Monotrait ratio (HTMT) based on $HTMT_{0.90}$ criterion was applied.

It is the most reliable method to detect the correlations between the two constructs if they are perfectly correlated (Henseler, Ringle & Sarstedt 2015). Henseler et al. (2015), claimed that when the Heterotrait-Monotrait ratio (HTMT) values are below 0.900, then the discriminant validity is ascertained. Table 3 shows that all the first-order constructs are below the Heterotrait-Monotrait ratio (HTMT) criterion of 0.90. In short, the discriminant validity is at the acceptable level. The next section discusses the assessment of second-order formative measurement model.

TABLE 2. Item loadings, composite reliability and average variance extracted from first-order constructs

First-Order Constructs	Items	Loadings	CR	AVE
Benevolence (BN)	BN1	0.821	0.880	0.648
	BN2	0.804		
	BN3	0.807		
	BN4	0.787		
Corporate strategic focus (CSF)	CSF1	0.768	0.927	0.717
	CSF2	0.853		
	CSF3	0.900		
	CSF4	0.881		
	CSF5	0.824		
External environmental orientation (EEO)	EEO2	0.952	0.951	0.906
	EEO3	0.952		
Egoism (EG)	EG1	0.799	0.841	0.572
	EG2	0.830		
	EG3	0.745		
	EG4	0.638		
Functional strategic focus (FSF)	FSF1	0.876	0.932	0.821
	FSF2	0.942		
	FSF3	0.900		
Internal environmental orientation (IEO)	IEO1	0.954	0.964	0.872
	IEO2	0.918		
	IEO3	0.949		
	IEO4	0.913		
Principled (PC)	PC1	0.909	0.920	0.744
	PC2	0.887		
	PC3	0.854		
	PC4	0.795		

Note: CR = composite reliability, AVE = average variance extracted

TABLE 3. Heterotrait-Monotrait ratio (HTMT) results of first-order constructs

	Benevolence	CSF	EEO	EG	FSF	IEO
Corporate strategic focus (CSF)	0.393					
External environmental orientation (EEO)	0.512	0.870				
Egoism (EG)	0.342	0.291	0.205			
Functional strategic focus (FSF)	0.458	0.875	0.765	0.388		
Internal environmental orientation (IEO)	0.510	0.876	0.695	0.221	0.735	
Principled (PC)	0.536	0.279	0.311	0.513	0.238	0.330

Note: discriminant validity is established at HTMT_{0.90} criterion

ASSESSMENT OF SECOND-ORDER FORMATIVE MEASUREMENT MODEL

Under the second-order formative measurement model, two tests, specifically variance inflation factor (VIF) and the significance of formative items' outer weights were carried out. Variance inflation factor (VIF) was used to examine the collinearity issues whereas the significance of formative items' outer weights was to check whether formative items were contributed to form the constructs (Hair et al. 2017). Referring to Table 4, all the items have variance inflation

factor (VIF) values less than 5. Therefore, it indicated that there were no collinearity issues in the second-order constructs. Furthermore, one formative items' outer weight was significant at $p < 0.005$ and was retained. Conversely, six formative items' outer weights were insignificant at $p < 0.005$. However, they were not removed from the analysis because their outer loadings were greater than the cutoff value of 0.5 as suggested by Hair et al. (2017). In short, all the formative items form the second-order construct were not removed. Also, the measurement model of this study was considered satisfactory.

TABLE 4. VIF, the significance of formative items' outer weights and outer loadings

Second Order Constructs	Items	VIF	t values	Outer loadings
Organizational ethical climate	Egoism	1.191	0.914*	0.614
	Benevolence	1.254	2.557	0.854
	Principled	1.427	1.150*	0.747
Corporate environmental citizenship	Internal environmental orientation	3.177	1.459*	0.903
	External environmental orientation	1.311	0.315*	0.540
	Corporate strategic focus	4.133	0.588*	0.769
	Functional strategic focus	2.675	1.311*	0.888

Note: *t value > 1.96 = significance < 0.05, VIF = variance inflation factor

ASSESSMENT OF STRUCTURAL MODEL

After the reflective and formative measurement models were confirmed, the structural model which included the coefficient of determination (R^2), effect size (f^2), predictive relevance (Q^2) and hypothesis were accessed. First, the coefficient of determination (R^2) was examined to determine the percentage of variance in the dependent variable that can be explained by one or more independent variable. The result showed that 0.227, which is 22.7% of the variance in corporate environmental citizenship, was explained by organizational ethical climate. Besides, effect size (f^2) was determined to examine the effect of independent variables on the dependent variables. According to Cohen (1988), effect size (f^2) values of 0.02, 0.15 and 0.35 represent small, medium and large. The result indicated that organizational ethical climate

has a medium effect of 0.293 on corporate environmental citizenship. In addition, prediction relevance (Q^2) was carried out to evaluate how well the dependent variables were explained by independent variables in the structural model (Chin 1998). As claimed by Hair et al. (2017), prediction relevance (Q^2) greater than 0 showed that the research model has a predictive relevance. The result obtained by a blindfolding procedure indicated that corporate environmental citizenship has a predictive relevance because the prediction relevance (Q^2) value was greater than 0, which is 0.049. Moreover, hypothesis testing was examined through a bootstrapping procedure in order to generate t values. The result in Table 5 revealed that organizational ethical climate has a significant relationship with corporate environmental citizenship. Hence, H_1 was supported.

TABLE 5. Hypothesis testing

Hypothesis	Relationship	Standard Beta	Standard Error	<i>t</i> value	Decision
H ₁	OEC -> CEC	0.476	0.144	3.294*	Supported

Note: OEC = organizational ethical climate, CEC = corporate environmental citizenship, **t* value > 1.96 = significance < 0.05

DISCUSSIONS

The findings of this research showed that organizational ethical climate is significantly related to corporate environmental citizenship. It can, therefore, be stated that the construction companies in Malaysia have specific environmental officers to handle the environment related issues. Normally, the environmental officers are positioned for full-time posts across the business units of these organizations. Hence, they can design ethical policies that are relevant to the needs of the operating environment. This increases the likelihood of organizational members' cooperation in following ethical policies for corporate environmental citizenship. Besides, the environmental officer embeds ethical values and principles for environmental protection throughout the organization.

It changes the behavior, decision making and interaction among the members of the organization. For instance, energy-saving principles (i.e switching off lights and air-conditioner during lunch hour) of Gamuda engineering Sdn Bhd; increased its members' awareness on the consequences of their actions such as; high water usages, causes high water bills. Their environmental awareness benefits corporate environmental citizenship. In terms of construction sites, environmental officers conduct weekly meetings to discuss and follow-up the construction waste and cleanliness with the subcontractors (i.e construction companies that outsourced most construction activities). This is because they do not focus on environmental actions. Therefore, the environmental officer's strong commitment has shaped the organizational ethical climate of the subcontractors to achieve corporate environmental citizenship.

RESEARCH IMPLICATIONS

This study provides theoretical implications for management research. The current study extends the previous studies by testing the impact of organizational ethical climate on corporate environment citizenship. It elevates a better understanding that stakeholder pressures, regulatory compliances, organizational images and organizational profit are not the factors that push the organization to enhance corporate environmental citizenship. In specific, the findings demonstrated that organizational ethical climate significantly influences corporate environmental citizenship. Thus, it broadens the role of organizational ethical climate in improving

corporate environmental citizenship. In addition, the literature of organizational ethical climate and corporate environmental citizenship are being enriched while examining their relationships. As such, other researchers will realize that it is a meaningful research that is worthy of further investigations in the future. Moreover, this study contributes to the Resource-Based View (RBV) theory by explaining the relationship between organizational ethical climate and corporate environmental citizenship. In line with that, organizational ethical climate is the organizational resource that is rare, valuable, difficult to substitute and imitate in order to achieve corporate environmental citizenship. Organizational ethical climate has higher levels of organizational specifics, embedded in the organizational culture/characteristics. It results less prone to substitution and hard to duplicate by competitors (Barney 1991). This could guide the organizations' environmental behaviors and ultimately translate into corporate environmental citizenship.

This study has contributed to the following practical implications; the construction companies can emphasize on organizational ethical policy, values and principles, to enhance corporate environmental citizenship. Therefore, the construction companies may communicate organizational ethical policy, values and principles through formal training sessions in order to highlight environmental issues and behaviors. For example, outdoor training, management games, class presentation and role play exercise may increase the effectiveness of the organizational ethical policy, values and principles' trainings. Besides, employees within the organization can be informed of organizational ethical policy, values and principles through other organizational communication channels such as Facebook, newsletters, twitter and websites. In doing so, they realize the organizations' concern for protecting the environment and increase corporate environmental citizenship. Moreover, the top management must serve as role models for corporate environmental citizenship to shape stronger organizational ethical climate. It shows the organizations' genuine commitment to preserving the environment instead of creating the images. Employees within the organization will then perceive the organization's strong environmental commitment and be willing to devote themselves to achieving corporate environmental citizenship. Furthermore, construction companies may empower employees within the organizations over environmental issues. They are more likely to trust the organizations when it gives autonomy to employees to handle environmental problems. Thus, they act more environmentally friendly.

LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

This study has several limitations. First, this study only includes organizational ethical climate as the only factor to influence corporate environmental citizenship. Likewise, there are several factors that may be important to corporate environmental citizenship. Future studies should embrace other factors such as organizational structure and the environment to make this current study more meaningful (Chou 2014).

Second, the present study is cross-sectional in design, which could not provide precise information about the relationship between organizational ethical climate and corporate environmental citizenship. This is because cross-sectional studies collect data in a number of times over a period of days, weeks or months (Sekaran & Bougie 2016). Accordingly, longitudinal studies can be considered to explore the changes of organizational ethical climate and corporate environmental citizenship in different stages.

Third, the sample size of this study is relatively small. It undermines the reliability and validity of the findings. Also, it influences the generalization of the population. Therefore, future research should be based on larger sample size to confirm the results.

Fourth, the study was carried out on a single business sector, which is the construction sector. Thus, this study can be replicated in other business sectors such as manufacturing, airlines and restaurants in order to gain a comprehensive understanding of the effect of organizational ethical climate on corporate environmental citizenship.

Fifth, the items used for measuring organizational ethical climate focused on how frequently it is implemented without examining the level of sophistication. It shows no distinction between weak or strong organizational ethical climate on corporate environmental citizenship. Weak or strong organizational ethical climate is suggested in future studies, to provide a thorough explanation of corporate environmental citizenship.

CONCLUSION

This paper enhances the understanding of the impact of organizational ethical climate on corporate environmental citizenship. The study also finds that organizational ethical climate has significant relationships with corporate environmental citizenship. In particular, for the construction companies that wish to maximize corporate environmental citizenship, it is necessary for them to prioritize organizational ethical climate. On top of that, construction companies should communicate appropriately through training and organizational communication channels with the organizational members in order to strengthen organizational ethical climate. In a similar vein, the study supports the Resource Based View (RBV) theory that states that organizational ethical climate

is the crucial organizational resource required to achieve corporate environmental citizenship because it is rare, valuable, difficult to substitute and imitate. In a nutshell, a solid foundation was provided for future research on organizational ethical climate and corporate environmental citizenship.

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