

## **The Relationship Between Corporate Social Responsibility and Employees' Pro-Environmental Behavior at the Workplace among Manufacturing Industries**

**Tong Sheau Yun<sup>1</sup>, Nor Kamariah Kamaruddin<sup>1,\*</sup> & Anim Zalina Azizan<sup>1</sup>**

<sup>1</sup>Department of Management and Technology, Faculty of Technology Management and Business, Universiti Tun Hussein Onn Malaysia, 86400 Batu Pahat, Johor, MALAYSIA

\*Corresponding Author

DOI: <https://doi.org/10.30880/rmtb.2021.02.02.001>  
Received 30 September 2021; Accepted 01 November 2021; Available online 01 December 2021

**Abstract:** Governments and academics are more conscious of environmental concerns and are actively seeking solutions to the many problems caused by contemporary industrial, economic, and human activity. Human behaviours, for example pollution, misuse of natural resources, raw materials, energy, have led to a large number of environmental issues. Thus, research on fostering pro-environmental behaviour (PEB) is necessary to address these problems, since individual PEB behaviours have an effect on organisational environmental sustainability. Hence, some organization have started to utilize social responsibility (CSR) as useful tool for facilitating successful company functioning, social growth and environmental sustainability. However, there are still limited studies to explore the relationship between CSR and PEB in the workplace. Therefore, the purpose of this study is to seeks the relationship between CSR and employees' PEB at the workplace among manufacturing industries in Pahang. Through an online survey, data were gathered from 230 respondents from Pahang's industrial sectors. The research employed convenient sampling techniques. Additionally, the descriptive and correlation analysis conducted to analyze the level of CSR and PEB and the relationship between CSR and employees' PEB at workplace. The results presented are that the manufacturing sectors in Pahang have a high degree of CSR and PEB at work. Moreover, CSR is found to has a significant relationship with the employees' PEB at the workplace among manufacturing industries in Pahang.

**Keywords:** Pro-environmental behavior, Corporate social responsibility, Workplace

## 1. Introduction

This section discussed in the research background about CSR and employees' PEB at the workplace among manufacturing industries, problem statement, research questions, research objectives, scope of the study, significance of the study, and limitation of the study.

### 1.1 Research Background

Since its emergence as an industrialised country, manufacturing industries have driven Malaysia's economic growth. The manufacturing sector, which represents more than 40% of GDP, also has a significant effect on Malaysian economy. Based on the Economic Report 2019/2020 (2019), the manufacturing sector was expected to grow slightly from 4% in 2019 to 4.1% by 2020. The development will be powered by steady improvement in export-oriented industries coupled with continued domestic-oriented expansion.

The manufacturing industries are those engaged in the production of commodities, materials or substances into new products. There are several manufacturing industries in Malaysia. Based on the Department of Statistics Malaysia (2020), manufacturing sales in Malaysia rose 7% to RM110.6 billion in February 2020, compared with RM103.4 billion in February 2019. Besides that, the total number of employees in the manufacturing sector was 2,277,882 persons, an increment of 1.6% or 36,080 persons compared to 2,241,802 persons in February 2019 according to the Monthly Manufacturing Statistics Malaysia in February 2020. The sales revenue per employee rose by 5.3% compared with the same month in 2019 to RM48,553.

With the increasing demand for environmentally-friendly goods, the manufacturing sector is also playing an important role in reducing pollution. Based on the Economic Census 2016 (2017), RM2.6 billion was spent on environmental protection with the manufacturing sector was the largest contributor to the percentage of environmental protection expenditure of 73.6%. However, the problems of environmental also pose an essential challenge to environmental sustainability. Therefore, people can manage by changing their behaviors to reduce their impact on the environment, such as pro-environmental behavior (Steg & Vlek, 2009). Pro-environmental behavior (PEB) applies to the actions that an employee exhibits for the safety of the natural environment at the workplace (Afsar and Umrani, 2019). Thus, PEB which focusing at individual level which is employees has significant consequences for companies, their members and employees to impact the quality of the natural environment.

Subsequently, corporate social responsibility (CSR) serves as a way to decrease the impact of corporate operations, through long-term success and confidence of stakeholders. CSR approach also has become a global concern today and has been introduced to help businesses cope with stakeholder pressure and improve their competitive advantage and efficiency (Jenkins, 2009). CSR is a useful tool for efficient financial, social and environmental management. Given that workers are a crucial community of stakeholders needing and promoting organizational efforts to identify and maintain a socially responsible workplace (Afsar *et al.*, 2018). CSR also is required as a corporate ethical and moral responsibility for a manufacturing industry whose operations require a broader group to participate, whether as a supplier of raw materials, employments and target markets (Handayani *et al.*, 2017).

### 1.2 Problem Statements

The problems of environmental present a major challenge to organizations that allow the organization to leverage substantial resources and capacities to make a transition to greater sustainability (Afsar *et al.*, 2018). Besides that, governments and organizations are now aware of all environmental issues and seek solutions to many of today's problems caused by manufacturing, economics and human activities (Stegall, 2006). Most citizens in these modern societies tend to place a

high value on economic prosperity rather than supporting PEB which is one of the most important issues in the world today (Gatersleben *et al.*, 2014). The government also intervenes in controlling the emissions and the use of toxic substances through the company should commit more to environmental protection rather than profit-oriented action (Stegall, 2006). Human behavior causes many issues of the environment due to greenhouse gas emissions, pollution and the use of natural resources, raw materials and energy (Steg and Vlek, 2009). However, previous researchers have studied PEB in people's lives, but little has been done predictors in the workplace (Tian and Robertson, 2019).

For decades, the industries have been fulfilling their CSR. CSR in a business environment has become a sustainable form of governance that has advantages for economic, environmental and social progress (Camilleri, 2017). Thus, most of the organization use CSR as a marketing tool (Sanclemente-Tellez, 2017). But, they apply CSR in inappropriate ways. Most researchers also focused on CSR's macro-level method to understand how organizations respond to sustainable needs (Afsar *et al.*, 2018). Therefore, there is a need to study at the micro level which focusing at the individual level (employees).

Moreover, there are limited studies focused on the relationship between the CSR and employees PEB (Afsar *et al.*, 2018). Consequently, past studies are more focused on the impact of CSR on consumers and on organizational but still lack empirical evidence of CSR and employees PEB participation in business activity (Tian & Robertson, 2019). Therefore, it is important to investigate how the employee's perceptions of CSR influence their involvement in PEB, as staffs they perceived to be the most significant stakeholder in promoting CSR efforts and influencing their actions in compliance with the organization's sustainability policies (Ardito and Dangelico, 2018). Based on the review of past studies, the researchers found that studies on CSR and PEB were still limited and needed more room to explore. Additionally, it is also found that most studies study CSR and PEB are more focusing on the context of services industry. However, it is a limited study conducted in manufacturing industries. Therefore, this study filled on the gaps by to explore the relationship between CSR and employees' PEB at the workplace among manufacturing industries.

### 1.3 Research Questions

- (i) What is the level of corporate social responsibility among the manufacturing industries in Pahang?
- (ii) What is the level of employees' pro-environmental behavior at the workplace among manufacturing industries in Pahang?
- (iii) What is the relationship between corporate social responsibility and employees' pro-environmental behavior at the workplace among manufacturing industries in Pahang?

### 1.4 Research Objectives

- (i) To determine the level of corporate social responsibility among the manufacturing industries in Pahang.
- (ii) To determine the level of employees' pro-environmental behavior at the workplace among manufacturing industries in Pahang.
- (iii) To identify the relationship between corporate social responsibility and employees' pro-environmental behavior at the workplace among manufacturing industries in Pahang.

### 1.5 Significance of the Study

The research on the implementation of CSR and PEB is very important and useful. Subsequently, the study has merit in the sense that it can help the manufacturing industries in Malaysia to adopt CSR and improve their PEB at the workplace continuously. Positive CSR and PEB at the workplace also make the organization as a community leader and a good role model for others to emulate. In addition,

this study can be significant to the manufacturing industry in Pahang to determine and improve the level of CSR and employees' PEB at the workplace. Through this study, it enhanced employees' self-concept and self-esteem because they believe that the organization is implementing practices and policies that benefit a variety of stakeholders. Furthermore, this study can be used by the future researcher as a reference or academic sources. It can provide an in-depth understanding of a literature review contribution towards CSR and PEB.

## 1.6 Scope of the Study

The research study focuses on the context, respondents, activities, and factors involved in workplace pro-environmental behavior issues. Subsequently, the research focused on the studies on the relationship between CSR and employees' PEB at the workplace. Simultaneously, the research also to determine the level of CSR and employees' PEB at the workplace among manufacturing industries. The scope of the study also covers the manufacturing industry in the East Coast Region, which is focused on Pahang region. The reason for choosing the manufacturing sector in the Pahang region because the manufacturing sector is one of the main drivers of the modern Pahang economy. The potential respondent consists of employees of the manufacturing industry who understand the processes and procedures of the organization.

## 2. Literature Review

This section discussed about the all relevant literature related to this research and critically discussed. This section also aims to provide evidence of selected literature review on CSR and PEB to help in the development of a conceptual framework and hypothesis for this research.

### 2.1 Pro-environmental Behavior (PEB)

#### (a) Definition of Pro-environmental Behavior

PEB has been conducted in the workplace or non-workplace. Therefore, people take global action and encourage more people to take PEB at anytime and anywhere. Meanwhile, PEB has been defined in many ways. The definition from a few authors based on the previous study is summarized in Table 1.

**Table 1: Definition of pro-environmental behavior in workplace**

Authors	Definition	Perspective
Kollmuss & Agyeman (2002)	“Behaviors that consciously attempt to minimize the negative impact of behavior on the natural and build environmental”.	Defined PEB from the reason for people act environmentally
Afsar & Umrani (2019)	“Behaviors that a staff exhibits for the safety of the natural environment at workplace”.	
Steg & Vlek (2009)	“Behaviors that do as little harm to the environment as possible or even support the environment”.	Defined PEB from an impact and intent perspective
Andersson <i>et al.</i> (2013)	“Any tangible environmentally friendly practices that help contributes to environmental sustainability”.	
Stern (2000)	“The extent to which it changes the availability of materials or energy from the environment or alters the structure and dynamics of ecosystems or the biosphere itself”.	

Banwo & Du (2019)	“All forms of voluntary or recommended activities performed by to protect the natural environment or enhance organizational practices in these areas”.	Focus on voluntary actions and initiatives around the micro, macro and out of the workplace
-------------------	--	---

For the purpose of this study, the researcher adopted the definition by Kollmuss and Agyeman (2002) who defined “pro-environmental behavior as the behaviors as consciously attempt to minimize the negative impact of behavior on the natural and built environment”.

#### (b) The Importance of Pro-environmental Behavior

Nowadays, the organization is working hard to formulate environmental protection strategies and purpose continuous solution to their running. One of the most important methods that organizations have begun to aware is to encourage workers to participate more regularly and consistently in pro-environmental activities (Afsar *et al.*, 2018). Therefore, the organizations begin to pay more attention to the importance of individual initiatives to improve organizational environmental performance.

Ture and Ganesh (2014) argued that understanding workplace-related PEB can help organizations recognize the factors that need to be focused when resolving natural environment-related change management issues. This also help the organization to achieve the least-cost advantage when they proper resource utilization and minimal waste are critical to improve operating productivity and in effect to cut down the cost of production or service (Aragón-Correa & Sharma, 2003). Additionally, by mitigating and encourage employees' PEB such as recycling, waste management, minimizing energy use or any other act that consciously seeks to minimize the negative impact of the action on the environment, a method can be adopted to reduce the negative impact of the organization on the environment and promote positive environmental impacts (Kollmuss & Agyeman, 2002).

#### 2.2 Categories of Pro-environmental Behavior

Ones and Dilchert (2012) has been classified pro-environmental behavior into five categories. The categories and subcategories of PEB are illustrated in Table 2. The researcher leads to five main categories of PEB, which are transforming, conserving, avoiding harm, influencing others, and taking initiative. The table also summarized the definition of each category, behavioral subcategories, and example of each subcategory.

**Table 2: Categories and subcategories of PEB (Ones and Dilchert, 2012)**

Categories	Definition	Behavioral Subcategories	Example of Behaviors
Transforming	Behaviors aimed at adapting and changing to make work products and processes more sustainable	Choosing responsible alternatives	Purchasing energy-efficient equipment
		Changing how work is done	Commuting through public transport
		Creating sustainable products and processes	Removing toxic chemicals from a manufacturing process
		Embracing sustainable innovations	Use virtual meetings instead of face-to-face meetings
Conserving	Behaviors aimed at avoiding	Creating sustainable products and processes	Removing toxic chemicals from a manufacturing process
		Recycling	Recycling cans, bottle, paper
		Reusing	Reusing disposable products, food products, paper

	wastefulness and preserving resources	Reducing use Repurposing	Turning off lights, printing double-sided Discarding surplus material that could have been used elsewhere
Avoiding harm	Behaviors involving avoidance and inhibition of negative environmental behaviors	Preventing pollution Monitoring impact Strengthening ecosystems	Treating hazardous waste properly Failing to clean up after an accident Planting trees around work facilities
Influencing others	Employee behaviors aimed at spreading sustainability behaviors to other individuals	Leading, encouraging, and supporting Managing, organizing, and coordinating Educating and training	Encourage cycling or commuting by public transport Make recycling bins available to all employees Training employees in the correct chemical treatment method
Taking initiative	Proactive, entrepreneurial behaviors that go against societal expectations	Initiating programs and policies Lobbying and activism Putting environmental interests first	Building a Green Team to plan sustainability program Advocacy for environmental issues to supervisors Don't use an air conditioning on hot days

### 2.3 Corporate Social Responsibility (CSR)

CSR has been a discussion in the workplace because it is a significant activity of the organizations. The future discussion on CSR is discussed in the next subsection, which includes the definition and previous studies that have conducted in CSR.

#### (a) Definition of Corporate Social Responsibility

CSR has been defined in many ways. The definition from a few authors based on the previous study are summarized in Table 3.

**Table 3: Definition of CSR**

Authors	Definition	Perspective
Berkhout (2005)	A crucial element in enhancing profitability, especially in current dynamic business environment.	Focus on how CSR affects profitability
David <i>et al.</i> (2005)	A civic role with moral, ethical and social obligations that offers the basis for a mutually beneficial contract between the organization and its people.	Focus on the right thing to achieve a good society
Turker (2009)	A corporate activity that seeks to positively influence primary societies, secondary societies, primary non-social	Focus on external or internal stakeholders

	and secondary non-social stakeholders and beyond their economic interests.	because it relates to the aspects of social, economic, stakeholders and voluntariness
Marsden (2006)	The core behavior and responsibility of companies for their overall impact on the societies in which they operate.	

In this current study CSR is defined as the core behavior and responsibility of companies for their overall impact on the societies in which they operate which adopted the definition by Marsden (2006).

#### *(b) Previous Studies of Corporate Social Responsibility*

Recently, there has been a growing concern about the CSR of the company in Malaysia. The growing concern of CSR is regarding as an important organizational practice that has stimulated much research (Tian and Robertson, 2019). The great concern of CSR in the company is because CSR is one way that motivates workers through their extra-role, discretionary, and pro-social actions to make an impact in the company (Asfar *et al.*, 2018). CSR also becomes an important organizational practice because it will affect employees' organizational attitudes and activities within and outside their roles.

Nevertheless, the issue of CSR in the environment has been controversial over the past few decades, as stakeholders increasingly demand that organizations have raised awareness and social responsibility for the environment (Duker & Olugunna, 2014). The organizations also will consciously try to incorporate consideration of the environment into their operations and activities, such as encouraging the benefits of environmentally sustainable goods, supporting eco-tourism, cultivating environmentally friendly actions by workplace climate, and more.

Due to the importance of CSR, several past studies regarding CSR has been carried out. For instance, the impact of CSR on firm principles (Servaes and Tamayo, 2013), reputation (Brammer and Pavelin, 2006), corporate identity and image (Lamond *et al.*, 2010), financial performance (Orlitzky *et al.*, 2003), organizational performance (Rettab *et al.*, 2009), consumer behavior (Kannaiah and Jayakumar, 2018), and other past studies. However, the study on CSR and PEB still limited and more related research is needed.

#### 2.4 Dimensions of Corporate Social Responsibility

In this current study, CSR is measured by three dimensions, which are stakeholder, customer and government (Suganthi, 2019). The detail discussed in the next subsection.

##### *(a) Stakeholder*

The first dimension of CSR is stakeholder. A stakeholder is “a person, group or organization that has interest or concern in an organization (Gaur, 2013). The stakeholders may influence or be influenced by the organization's actions, priorities, and policies”. Some main stakeholder's examples are managers, employees, owners, suppliers, and the community from which the business draws its resources.

The adoption of CSR by a company can make the firm considered to be socially responsible for obtaining stakeholders support. Hence, there are three specific reasons motivate stakeholders to press the companies to become involved in CSR, such as instrumental, relational and moral (Aguilera *et al.*, 2007). The instrument has driven by self-interest, relational driven by a concern for ties between members of the community and moral driven by a belief in ethical practices and moral standards. Furthermore, the stakeholder view claims for a CSR that considering the contributions of stakeholder to the corporate wealth creation process. Consequently, the organization is responsible for mitigating risk and growing benefits for stakeholders on the one side but also for equal distribution of benefits on

the other. It can be assumed that the firms' decision-making process involves stakeholders as they agree to implement CSR projects.

*(b) Customer*

The second dimension of CSR is customer. Customers, also known as clients, purchasers, and buyers are organizations or components of business-to-business customers or end-user consumers. From the point of view of a manufacturer, customers include distributors, retailers and individuals who purchase items from the retailers (Caplan, 2001).

In this dimension of CSR, the companies are actively involved in social and community affairs. Based on Farooq *et al.* (2014), it concerns a company's obligations to customers and goods, including product safety, customer service and consumer complaint management, and beyond the legislation.

The idea of giving customers loyalty and satisfaction is nothing new to companies but being accountable to customers has an effect on profitability. However, the expectations and perceptions of customers are regarded as having a direct impact on the design and effectiveness of the company's strategy (Fukukawa *et al.*, 2007)

*(c) Government*

The third dimension of the CSR is government. The government refers to an actor who has exclusive power over lawful force in a specific territory (Moon, 2002). Governments are involved in CSR, as it concerns not only policy goals relating to sustainable development and the conservation of the environment, but also foreign policy priorities such as human development and international assistance (Haufler, 2001).

It can be concluded the government plays an important role, because of the predominantly voluntary aspect of CSR. Governments use a variety of methods to promote better CSR practices in different sectors. Governments can promote law enforcement not only through legislation but also through other tools, such as taxes, incentives, and charges (Nyquist, 2003), as well as reporting requirements, licenses and restrictions on efficiency (Glachant *et al.*, 2002).

Government action also is important for creating an encouraging private sector growth environment that reduces risks, reduces costs and obstacles of operation, and increases incentives and opportunities for competitive and responsible private enterprises. In addition, the challenges facing government agencies in implementing a CSR agenda is to establish priorities, raise awareness, develop opportunities and support, and mobilizing resources from cross-sectoral cooperation in the national context, as well as expand on existing programs and capabilities.

## 2.5 Past Studies on Corporate Social Responsibility and Pro-Environmental Behavior

The finding of the research by Afsar and Umrani (2019) in various industries such as fossil fuel, cement, automobile, pharmaceutical, and agriculture industries showed that stakeholder, customer and government directly influenced moral reflection, co-worker pro-environmental advocacy and environmental commitment. The finding also showed that moral reflectiveness, co-worker pro-environmental advocacy and environmental commitment partly regulate the relationship between stakeholder, customer, government and PEB for employees.

Next, the previous related study of Suganthi (2019) which has conducted in manufacturing, service and information technology industries in Chennai. The finding reported there is a positive relationship between the stakeholder, government, customers and employees' PEB at the workplace. It also found that there is an insignificant mediating relationship of green practice between stakeholder, government, customer and employees' PEB at the workplace.

Furthermore, the research of Tian and Robertson (2019) in large and medium-sized casinos and hotels in Guangdong China. This research contributes to the increasing research on workplace PEB predictors by defining stakeholder, customer and government as an additional precursor indirectly linked to the voluntary PEB of employees by organizational recognition, and by demonstrating that such relationships rely on empathy.

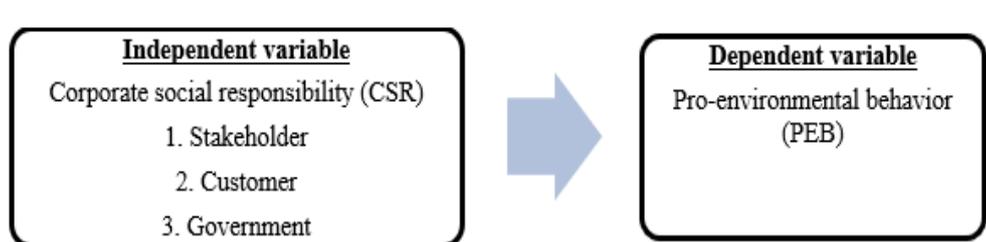
The study by Gkorezis and Petridou (2017) which conducted on Greek private employees has a positive relationship between stakeholders and PEB of employees. As well, the stakeholders have a direct and indirect impact on PEB through organizational recognition.

Additionally, recent study conducted by Afsar *et al.* (2018) in the hotels industry found that perceived corporate social responsibility has both a direct and an indirect impact on PEB through organizational recognition. The results also predicting employees' PEB for the interactive impact of the servant leader of a particular environment with CSR.

Therefore, it is hypothesized that there is a significant relationship between corporate social responsibility and employees' pro-environmental behavior at the workplace among manufacturing industries in Pahang.

## 2.6 Conceptual Framework

In this study, the framework includes variables of CSR and PEB. Corporate social responsibility is an independent variable while pro-environmental behavior is the dependent variable. CSR is measurement by 3 dimensions in this research focused on stakeholder, customer and government. Overall, the conceptual framework of this study is shown in Figure 1



**Figure 1: Conceptual Framework**

## 3. Research Methodology

This section defines the research methodology conducted in the study and the method of collecting data for the purpose of estimates the conducted research and assumed hypothesis. In this study, a quantitative approach is the main methodology that uses in the research.

### 3.1 Research Design

In this study, the descriptive research design and correlation analysis are used by the researcher to examine the relationship between CSR and PEB in the manufacturing industry. The type of investigation in this research is a correlation study that described the relationship between CSR and PEB. In this study, the unit of analysis based on individual level (employee). Non-random sampling technique is used in this study. The survey of this study conducted with a cross-sectional study to collect the data. The data is conducted on groundwork quantitative research to gather primary data. The questionnaire is used as a research instrument and distributed to the employees in the manufacturing industries through Google Form to collect data.

In this study, the identified target population is the employees of the manufacturing industries located at Pahang. The reason for choosing to conduct this research in Pahang is the manufacturing sector is one of the main drivers of the modern Pahang economy. Based on ECER Master Plan 2.0 (2019), with Kuantan expanding into a deep-water port, Pahang will become a manufacturing hub. Thus, Pahang is expected to be at the forefront of ECER growth and development. The total number of employees in the Pahang manufacturing industries is 44489 people according to Economic Census 2016 statistics. Based on the table of Krejcie and Morgan (1970), the sample sizes that are needed for this study are 380 from the total population. The unit of analysis is the employees of the manufacturing industries in Pahang. In this study, non-random sampling technique is used. The data was collected using a convenience sampling method because research has not been able to get the latest total of population sampling frame from any official websites about the population of manufacturing industries in Pahang. Convenience sampling also is easy, inexpensive and quick to perform for carrying on research (Etikan *et al.*, 2016).

The research instrument refers to the measurement tools that are designed to obtain the primary information on the topic being studied (Sekaran & Bougie, 2016). A structured questionnaire is used in this study to collect information about CSR and PEB. Moreover, the questionnaire adopted from Tian & Robertson (2019) and Cheema *et al.* (2019). The questionnaire is divided into three sections, of which Section A is the respondent's demographic information, Section B is about CSR and Section C is about the PEB at the workplace. In section B and C, 5-point Likert scale is used to measure the level of CSR and PEB. Each question has a response scale from 1 to 5 (1=strongly disagree to 5=strongly agree), reflecting the opinion of the respondent. Hence, the respondents required to rank the statements that closely describe their perceived CSR and PEB at the workplace.

Thirty set of questionnaires were distributed to the manufacturing industry for a pilot test study before the questionnaire was finalized. Based on respondent's feedback on comments, some improvements were made to the questions in the questionnaire. The researcher improves the quality of those ambiguous and misleading issues and ensures the respondents answer them easily.

### 3.2 Data Collection

Primary data is gathering first-handed data for a specific research goal (Hox and Boeije, 2005). A structured questionnaire is carried out in this study to collect relevant data from the respondents. This study is adopted an online questionnaire used by Google Forms to create a questionnaire and then sent a link of the Google Form to respondents by email or WhatsApp. Moreover, Google Form is conducted in English and Malay and distributed to the employees of the manufacturing industry in Pahang.

Secondary data is data that was initially collected for different aims and reused for another question (Hox and Boeije, 2005). For this study are retrieved from several resources such as published books, scholarly journal, articles and other resources. Most of the secondary data in this study were obtained from Google Scholar, Emerald and Science Direct.

### 3.3 Data Analysis

Data analysis is a data evaluation process that uses analytical and logical reasoning to examine each component of the data that has been collected. After collected the data, the data were conducted to determine whether the study was achieved the research objectives.

Descriptive analysis is applied to demographic information, level of CSR and level of employees' PEB at the workplace. Raw data collected through questionnaires are analyzed using IBM SPSS Statistics Version 22. The data were tabulated and analyzed in the form of frequency percentage, mean, and standard deviation.

#### 4. Data Analysis and Results

Data analysis is a data evaluation process that uses analytical and logical reasoning to examine each component of the data that has been collected. After collected the data, the data were conducted to determine whether the study was achieved the research objectives.

Descriptive analysis is applied to demographic information, level of CSR and level of employees' PEB at the workplace. Raw data collected through questionnaires are analyzed using IBM SPSS Statistics Version 22. The data were tabulated and analyzed in the form of frequency percentage, mean, and standard deviation.

Correlation analysis used to identify the relationship between CSR and employees' PEB at the workplace among manufacturing industries in Pahang. Spearman's rank correlation coefficient is used in this study to test the hypothesis as the data is non-normal.

##### 4.1 Results

The researcher has been successfully collected 230 completed questionnaires from the respondents of manufacturing industries in Pahang. Hence, this section discussed regarding the analysis of data from the completed questionnaire and the results of the analysis.

##### (a) Response Rate and Demographic Profile

**Table 4: Response rate**

Item	Description
Population	44489
Sample size	380
Questionnaires distributed	380
Questionnaires collected	230
Usable respondent	230
Percentage (%)	60.53%

As shown in Table 4, a total of 380 sets of questionnaires were distributed to manufacturing industries employees. Surprisingly, a total of 230 sets of usable questionnaires were collected which reflects the response rate at 60.53% from the overall sample size.

**Table 5: Summary of demographic profile**

Item	Frequency	Percentage (%)
Preferred Language	English	49.1
	Malay	50.9
Gender	Male	45.2
	Female	54.8
Age	25 years old and below	20.4
	26 to 35 years old	21.7
	36 to 45 years old	31.3
	46 years old and above	26.5
Race	Malay	35.2
	Chinese	43.9
	Indian	20.9
	Secondary School	34.8
	Pre-University / Diploma	23.0
	Bachelor's Degree	32.2

	Master	19	8.3
	Doctorate / PhD	4	1.7
Working Experience	3 years and below	61	26.5
	4 to 6 years	46	20.0
	7 to 9 years	43	18.7
	10 years and above	80	34.8

Accordingly, the results of the demographic analysis are shown in the Table 5. The result shows 45.2% occupied by Male with the total of 104, while female comprised 126 (54.8%) of the respondents.

The result showed that there are 47 respondents (20.4%) aged 25 years old and below. Meanwhile, 50 respondents (21.7%) aged range from 26 to 35 years old. The following respondents between 36 to 45 years old as most of the respondents which are 72 people or 31.3% of the respondents. While there are 26.5% which is 61 respondents aged 46 years old and above. The highest frequency for race of respondents are Chinese with the total of 101 respondents (43.9%). For Malay, the frequency of the respondents is 81 (35.2%). Indian has the lowest frequency and percentage which is 48 (20.9%).

Out of 230 respondents, 80 of them have the education level of secondary school with a percentage of 34.8%, 53 respondents are pre-university or diploma with 23%, 74 respondents (32.2%) are bachelor's degree, 19 respondents are master with 8.3%, and the rest 4 respondents (1.7%) are doctorate or PhD. In terms of working experience, 26.5% which is 61 respondents who have the range of 3 years and below working experience, followed by 20.0% which is 46 respondents who have a range of 4 to 6 years of working experience. Next, the total numbers for employees who have a range of 7 to 9 years consist of 18.7% which has 43 respondents. While there are 34.8% (80 respondents) who has a working experience for 10 years and above in manufacturing industries.

#### (b) Reliability Analysis

This study has conducted the test for the reliability and validity test, based on Table 6, the Cronbach's Alpha value for the pilot study of CSR is 0.944 and PEB is 0.956. The number of respondents in the pilot study is 30 employees from the manufacturing industries in Pahang. The alpha value obtained from the pilot study considered as CSR and PEB is greater than 0.9. It indicates that both variables measurement has achieved an excellent reliability. Whereas, the Cronbach's alpha value of the CSR for the real study is 0.812 while PEB is 0.815. All items are adopted from the previous established studies shows a good as Cronbach's alpha values for CSR and PEB and beyond the minimum value of 0.8.

**Table 6: Reliability test results**

Variables	Total No of Items	Cronbach's Alpha of Pilot Test (N=30)	Cronbach's Alpha of Actual Test (N=230)
Corporate Social Responsibility	12	0.944	0.812
Pro-environmental Behavior	12	0.956	0.815

#### (c) Descriptive Analysis

**Table 7: Descriptive statistics data**

Item	N	Mean (M)	Standard Deviation (SD)
Corporate Social Responsibility Stakeholder	230	3.8553	0.6267

Customer	230	4.4116	0.5356
Government	230	4.3413	0.6834
Overall		4.2027	0.6651
Pro-environmental Behavior	230	4.0587	0.4688

Based on Table 7, the mean value for all items related to CSR falls within the range of 3.8553 to 4.3143, Meanwhile, the standard deviation of CSR in the range of 0.53564 to 0.68342, which includes stakeholder (M=3.8553 and SD=0.6267), customer (M=4.4116 and SD=0.5356) and government (M=4.3413 and SD=0.6834). Overall, CSR had a mean of 4.2027 and a standard deviation of 0.6651. While PEB shows a mean of 4.0587 and with a standard deviation of 0.4688. The result also concluded that CSR and PEB are at a high level, as the mean of CSR and PEB are in the range of 3.68 to 5.00. These indicate that respondents were responsible on their overall impact on the societies and likewise passionate towards environmental behavior.

(d) *Normality Test*

**Table 8: Result of normality test for all variable**

Item	Kolmogorov-Smirnov <sup>a</sup>		
	Statistic	df	Significant value
Corporate Social Responsibility	0.117	230	0.000 (not normal)
Pro-environmental Behavior	0.094	230	0.000 (not normal)

To test the normality, this study has conducted a Kolmogorov-Smirnov test due to a large sample of 230. Based on the Table 8, Kolmogorov-Smirnov test shows that the significant value for each variable, which are CSR (0.000) and PEB (0.000). Thus, the significant value obtained is less than 0.05, it is indicated that the data obtained are non-normal (Ghasemi & Zahediasl, 2012).

(e) *Correlation Analysis*

Correlation analysis was conducted in order to achieve the third objective of this study, which is to identify the relationship between corporate social responsibility and employees' pro-environmental behavior (PEB) at the workplace among manufacturing industries in Pahang. Spearman's rank correlation coefficient between CSR and PEB is 0.628 as shown in Table 9. These appears to be strong relationship between CSR and PEB. The correlation analysis also supports a significant positive relationship between CSR and PEB. Therefore, a hypothesis is supported.

**Table 9: Correlation analysis by using Spearman's rank correlation coefficient**

		Corporate Social Responsibility	Pro-environmental Behavior
Spearman's Rho	Corporate Social Responsibility	Correlation Coefficient	1.000
		Sig.	0.000
		N	230
	Pro-environmental Behavior	Correlation Coefficient	0.628 **
		Sig.	0.000
		N	230

\*\* Correlation is significant at the level of 0.01

## 5. Discussions

This study focused to identify the relationship between CSR and employees' PEB at the workplace among the manufacturing industries in Pahang. The data was collected from the employees in manufacturing industries in Pahang through an online survey and have been analyzed and reported in the earlier section. Thus, this sub section will be discussing the findings which focusing on the objectives of this study.

### 5.1 Discussion for Objective 1

The finding showed that there is a high level of corporate social responsibility among the manufacturing industries in Pahang. The result showed that CSR is influenced by stakeholders, customers and government. The overall mean of CSR is 4.2027 indicated the most of respondents are agreed about the 3 dimensions of the perceived CSR. Consequently, it concluded the overall mean of CSR is at the range of high level.

Suganthi (2019) claimed that the customer plays a very significant role followed by other social and non-social stakeholders and government in stakeholder theory. Stakeholder theory by Freeman (2010) is related to CSR, because customers, governments and social and non-social stakeholders in the stakeholder theory will ultimately have a greater impact on the social causes of their concern in CSR activities. In addition, the theory of Perry and Kingdon (1985) described the large social interest in CSR that would convert into higher CSR levels among Western food companies, as the citizens' expectations for CSR would have led to CSR supported by the government (Biswas & Roy, 2015). On the contrary, Ikram *et al.*, (2020) pointed out the lower CSR adoption levels of South Asian food companies indicated that a greedy nature because they are indecisive to spend some of their profits to promote CSR.

### 5.2 Discussion for Objective 2

According to Table 4.4 in the Appendix C, most respondents are agreed about PEB at the workplace and the overall mean of PEB is 4.0587 which is at the range of high level. Therefore, there is a high level of employees' PEB at the workplace among manufacturing industries in Pahang.

The result from this study is being supported by Blok *et al.* (2015) who stated that there are strong distinctions between internal and external factors affecting PEB in the workplace. For instance, leadership support and exemplary PEB are at stake and have a direct positive effect on the desire of workers to behave pro-environmental. Hence, it is necessary to minimize the negative effect of behavior taken by employees on the natural environment in order to achieve sustainability in the company, since employees spend about one-third of their everyday lives in their workplace.

Banwo and Du (2019) who conducted a study on SMEs in cities of Jiangsu Province, indicated SMEs employees need to have more environmentally friendly facilities and a high understanding of environmental concerns in the workplace. Thus, there is a positive influence of SME employees' PEB at the workplace and obtain a high score in the result. SMEs' business practices have an impact on the environment and PEB can help SMEs reduce their negative impact on the environment.

### 5.3 Discussion for Objective 3

Based on the result in this study, there is a significant positive relationship between CSR and employees' PEB at the workplace among manufacturing industries in Pahang. As a result of Spearman's rho shows that the correlation coefficient between CSR and PEB is 0.628. The result is supported the finding by Gkorezis and Petridou (2017), Suganthi (2019), Afsar and Umrani (2019), Cheema *et al.* (2019) and Afsar *et al.* (2018).

The outcome from this study is being supported by Gkorezis and Petridou (2017) who stated that the positive relationship between CSR and PEB of employees. As the employees' view of organizations' CSR may have a clearer and greater impact on employees' subsequent reactions compared with actual corporate behaviors that employees may or may not be aware (Rupp *et al.*, 2013).

Furthermore, the result from this study is in sync with the result of Suganthi (2019), the findings demonstrated CSR has a positive and significant influence on employees' PEB at the workplace. This result shows that due to the relationship between the organization and its social and non-social stakeholders, customers and the government has improved, the implementation of the CSR plan has improved the PEB of employees in the workplace.

Afsar and Umrani (2019), Cheema *et al.* (2019) and Afsar *et al.* (2018) also stated that CSR has a positive impact on PEB. This is because the organizations that implement CSR activities generate positive and environmentally friendly way that can be moved to an individual level and thereby trigger task-related PEB for employees. In contrast, these previous studies also found out CSR has an indirect impact on PEB, because of moral reflectiveness, coworker advocacy, environmental commitment and organizational identification are a mediating mechanism that accounts for the relation between CSR and PEB as it impacted not only by the perceptions of CSR by employees but also affects PEB.

## 6. Conclusion

As discussed in the earlier section in this paper, the finding reported the level of CSR and PEB among the employees of manufacturing industries in Pahang is at high level. Additionally, a hypothesis tested in this study described CSR is positively associated to employee's PEB. Thus, the findings were relevant to the existing body of research, showing that a company's CSR impacts employee environmental advocacy. This makes sense, since companies that put in place socially conscious policies, such as promoting social equality and environmental sustainability, may help transfer the positive and environmentally conscious ideals to the individual level, helping workers complete their work-related tasks. Moreover, manufacturing companies' may would do well to adopt CSR practices if they want to promote pro-environmental behaviour on the individual level by incorporate CSR initiatives into the HR strategy and track employee views of the organization's CSR efforts to keep track of their effectiveness.

In the light of the recommendations of the research, there are some suggestions to be improve for the future research. Firstly, future studies may use a longitudinal study. This is because, the more time that is spent to obtain the data, the greater the number of people who can be targeted. A longer period of time also provides an opportunity to encourage the understanding of the relationships between CSR and employees' PEB at the workplace. Secondly, rather of utilizing an online questionnaire, future study may explore conducting qualitative interviews with respondents to get more in-depth data rather than using a quantitative approach. Therefore, future research can keep up a key positive way to obtain more references and accurate data from being collected from respondents. Lastly, this research is encouraging to target a larger population and focus all over Malaysia in the future. Therefore, the scope of the study should be further expanded to include more locations to reduce bias in results and improve the reliability and accuracy of the data.

## Acknowledgement

This research is part of Technology & Innovation Management Focus Group activities in developing student competencies. Special thanks to the Faculty of Technology Management and Business and UTHM in general.

## References

- Afsar, B., Cheema, S., & Javed, F. (2018). Activating Employee's Pro-Environmental Behaviors: The Role of CSR, Organizational Identification, and Environmentally Specific Servant Leadership. *Corporate Social Responsibility and Environmental Management*, 25(5), 904–911. <https://doi.org/10.1002/csr.1506>
- Afsar, B., & Umrani, W. A. (2019). Corporate Social Responsibility and Pro-Environmental Behavior at Workplace: The Role of Moral Reflectiveness, Coworker Advocacy, and Environmental Commitment. *Corporate Social Responsibility and Environmental Management*, 27(1), 109–125. <https://doi.org/10.1002/csr.1777>
- Aguilera, R. V., Rupp, D. E., Williams, C. A., & Ganapathi, J. (2007). Putting the S Back in Corporate Social Responsibility: A Multilevel Theory of Social Change in Organizations. *The Academy of Management Review*, 32(3), 836–863. <https://doi.org/10.2307/20159338>
- Andersson, L., Jackson, S. E., & Russell, S. (2013). Greening organizational behavior: An introduction to the special issue. *Journal of Organizational Behavior*, 34(2), 151–155. <https://doi.org/10.1002/job.1854>
- Aragón-Correa, J. A., & Sharma, S. (2003). A Contingent Resource-Based View of Proactive Environmental Strategy. *The Academy of Management Review*, 28(1), 71–88. <https://doi.org/10.2307/30040690>
- Ardito, L., & Dangelico, R. M. (2018). Firm Environmental Performance under Scrutiny: The Role of Strategic and Organizational Orientations. *Corporate Social Responsibility and Environmental Management*, 25, 426–440. <https://doi.org/10.1002/csr.1470>
- Banwo, A. O., & Du, J. (2019). Workplace Pro-Environmental Behaviors in Small and Medium-Sized Enterprises: An Employee Level Analysis. *Journal of Global Entrepreneurship Research*, 9(34), 1–20. <https://doi.org/10.1186/s40497-019-0156-4>
- Berkhout, T. (2005). Corporate Social Responsibility Can Be the Strategic Engine for Long-Term Corporate Profits and Responsible Social Development. *Alternatives Journal*, 31(1), 15–18. Retrieved from [www.jstor.org/stable/45019768](http://www.jstor.org/stable/45019768)
- Biswas, A., & Roy, M. (2015). Leveraging factors for sustained green consumption behavior based on consumption value perceptions: Testing the structural model. *Journal of Cleaner Production*, 95, 332–340. <https://doi.org/10.1016/j.jclepro.2015.02.042>
- Blok, V., Wesselink, R., Studynka, O., & Kemp, R. (2015). Encouraging sustainability in the workplace: a survey on the pro-environmental behaviour of university employees. *Journal of Cleaner Production*, 106, 55–67. <https://doi.org/10.1016/j.jclepro.2014.07.063>
- Brammer, S. J., & Pavelin, S. (2006). Corporate Reputation and Social Performance: The Importance of Fit. *Journal of Management Studies*, 43(3), 435–455. <https://doi.org/10.1111/j.1467-6486.2006.00597.x>
- Camilleri, M. A. (2017). Corporate Sustainability and Responsibility: Creating Value for Business, Society and the Environment. *Asian Journal of Sustainability and Social Responsibility*, 2(1), 59–74. <https://doi.org/10.1186/s41180-017-0016-5>
- Caplan, B. (2001). Standing Tiebout on his Head: Tax Capitalization and the Monopoly Power of Local Governments. *Public Choice*, 108, 101–122. <https://doi.org/10.1023/A:1017564623294>
- Cheema, S., Afsar, B., Al-Ghazali, B. M., & Maqsoom, A. (2019). How Employee's Perceived Corporate Social Responsibility Affects Employee's Pro-Environmental Behaviour? The Influence of Organizational Identification, Corporate Entrepreneurship, And Environmental Consciousness. *Corporate Social Responsibility and Environmental Management*, 27, 616– 629. <https://doi.org/10.1002/csr.1826>
- David, P., Kline, S., & Dai, Y. (2005). Corporate Social Responsibility Practices, Corporate Identity, and Purchase Intention: A Dual-Process Model. *Journal of Public Relations Research*, 17(3), 291–313. [https://doi.org/10.1207/s1532754xjpr1703\\_4](https://doi.org/10.1207/s1532754xjpr1703_4)
- Department of Statistics Malaysia. (2017). *Economic Census 2016*. Putrajaya: The Office of Chief Statistician Malaysia.
- Department of Statistics Malaysia. (2020). *Monthly Manufacturing Statistics, Malaysia February 2020*. Putrajaya: The Office of Chief Statistician Malaysia.
- Duker, J., & Olugunna, M. (2014). *Corporate Environmental Responsibility (CER): A case of Logistics Companies in Sweden*. Uppsala universitet, Företagsekonomiska institutionen: Master Thesis.

- East Coast Economic Region Development Council (ECERDC) & UKM Pakarunding Sdn Bhd. (2019). *The ECER Master Plan 2.0*. Putrajaya: East Coast Economic Region Development Council.
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1-4. <https://doi.org/10.11648/j.ajtas.20160501.11>
- Farooq, M., Omer, F., & Jasimuddin, S. M. (2014). Employees Response to Corporate Social Responsibility: Exploring the Role of Employees' Collectivist Orientation'. *European Management Journal*, 32(6), 916–927. <https://doi.org/10.1016/j.emj.2014.03.002>
- Freeman, R. E. (2010). *Strategic management: A stakeholder approach*. Cambridge: University Press.
- Fukukawa, K., Balmer, J. M. T., & Gray, E. R. (2007). Mapping the Interface Between Corporate Identity, Ethics and Corporate Social Responsibility. *Journal of Business Ethics*, 76(1), 1–5. <https://doi.org/10.1007/s10551-006-9277-0>
- Gatersleben, B., Murtagh, N., & Abrahamse, W. (2014). Values, Identity and Pro-Environmental Behaviour. *Contemporary Social Science*, 9(4), 374–392. <https://doi.org/10.1080/21582041.2012.682086>
- Gaur, V. (2013). Understand Your Stakeholders. *International Journal of Advancements in Research & Technology*, 2(1), 8. Retrieved from [http://www.ijart.org/docs/Understand\\_Your\\_Stakeholders.pdf](http://www.ijart.org/docs/Understand_Your_Stakeholders.pdf)
- George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference. 11.0 update*, 4th ed. Boston: Allyn & Bacon.
- Ghasemi, A., & Zahediasl, S. (2012). Normality Tests for Statistical Analysis: A Guide for Non-Statisticians. *International Journal of Endocrinology Metabolism*. 10(2), 486-489. <https://doi.org/10.5812/ijem.3505>
- Gkorezis, P., & Petridou, E. (2017). Corporate Social Responsibility and pro-environmental behaviour: Organisational identification as a mediator. *European Journal of International Management*, 11(1), 1-18. <https://doi.org/10.1504/EJIM.2017.081248>
- Glachant, M., Schucht, S., & Wätzold, Alexandra Bültmann, F. (2002). Companies' Participation in EMAS: The Influence of the Public Regulator. *Business Strategy and the Environment*, 11, 254–266. <https://doi.org/10.1002/bse.333>
- Handayani, R., Wahyudi, S., & Suharnomo, S. (2017). The Effects of Corporate Social Responsibility on Manufacturing Industry Performance: The Mediating Role of Social Collaboration and Green Innovation. *Business: Theory and Practice*, 18, 152–159. <https://doi.org/10.3846/btp.2017.016>
- Haufler, V. (2001). *A Public Role for the Private Sector: Industry Self-regulation in a Global Economy*. Washington, D.C.: Carnegie Endowment for International Peace.
- Hox, J., & Boeije, H. (2005). Data Collection, Primary Versus Secondary. In *Encyclopedia of Social Measurement*, 593–599. <https://doi.org/10.1016/B0-12-369398-5/00041-4>
- Ikram, M., Qayyum, A., Mehmood, O., & Haider, J. (2020). Assessment of the effectiveness and the adaption of CSR management system in food industry: The case of the South Asian versus the Western food companies. *SAGE Open*, 10(1), <https://doi.org/10.1177/2158244019901250>
- Jenkins, H. (2009). A “Business Opportunity” Model of Corporate Social Responsibility for Small-and Medium-Sized Enterprises. *Business Ethics: A European Review*, 18(1), 21–36. <https://doi.org/10.1111/j.1467-8608.2009.01546.x>
- Kannaiah, D., & Jayakumar, A. (2018). Impact of Corporate Social Responsibility (CSR) Practices on Consumer Behavior (with Reference to FMCGs in Tamil Nadu). *International Journal of Business and Management*, 13(3), 28–41. <https://doi.org/10.5539/ijbm.v13n3p28>
- Kollmuss, A., & Agyeman, J. (2002). Mind the Gap: Why Do People Act Environmentally and What Are the Barriers to Pro-Environmental Behavior? *Environmental Education Research*, 8(3), 239–260. <https://doi.org/10.1080/13504620220145401>
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and psychological measurement*, 30(3), 607-610. <https://doi.org/10.1177/001316447003000308>
- Lamond, D., Dwyer, R., Arendt, S., & Brettel, M. (2010). Understanding the Influence of Corporate Social Responsibility on Corporate Identity, Image, and Firm Performance. *Management Decision*, 48(10), 1469–1492. <https://doi.org/10.1108/00251741011090289>
- Lim, J. (2019). *Economic Report 2019/2020*. Services to be fastest growth sector in 2020, construction sector sees strong recovery. Retrieved from <https://www.theedgemarkets.com/article/services-be-fastest-growth-sector-2020-construction-sector-sees-strong-recovery>
- Marsden, C. (2006). In Defence of Corporate Responsibility. In A. Kakabadse & M. Morsing (Eds.). *Corporate Social Responsibility Reconciling Aspiration with Application*, pp. 24–39. [https://doi.org/10.1057/9780230599574\\_3](https://doi.org/10.1057/9780230599574_3)
- Moon, J. (2002). The Social Responsibility of Business and New Governance. *Government and Opposition*, 37, 385–408. <https://doi.org/10.1111/1477-7053.00106>

- Nyquist, S. (2003). The Legislation of Environmental Disclosures in Three Nordic Countries – A Comparison. *Business Strategy and the Environment*, 12(1), 12–25. <https://doi.org/10.1002/bse.344>
- Ones, D. S., & Dilchert, S. (2012). Employee Green Behaviors. *Managing Human Resource for Environmental Sustainability*, 85–116.
- Orlitzky, M., Schmidt, F., & Rynes, S. (2003). Corporate Social and Financial Performance: A Meta-Analysis. *Organization Studies*, 24, 403–441. <https://doi.org/10.1177/0170840603024003910>
- Perry, J., & Kingdon, J. W. (1985). Agendas, alternatives, and public policies. *Journal of Policy Analysis and Management*, 4, 621. <https://doi.org/10.2307/3323801>
- Prion, S. & Haerling, K. (2014). Making Sense of Methods and Measurement: Spearman-Rho Ranked-Order Correlation Coefficient. *Clinical Simulation in Nursing*, 10, 535-536. <https://doi.org/10.1016/j.ecns.2014.07.005>
- Rettab, B., Brik, A. Ben, & Mellahi, K. (2009). A Study of Management Perceptions of the Impact of Corporate Social Responsibility on Organisational Performance in Emerging Economies: The Case of Dubai. *Journal of Business Ethics*, 89, 317–390. <https://doi.org/10.1007/s10551-008-0005-9>
- Rupp, D. E., Shao, R., Thornton, M. A., & Skarlicki, D.P. (2013). Applicants' and Employees' Reactions to Corporate Social Responsibility: The Moderating Effects of First-Party Justice Perceptions and Moral Identity. *Personnel Psychology*, 66(4), 895-933. <https://doi.org/10.1111/peps.12030>
- Samsudin, K., Awang, M. M. & Ahmand, A. (2017). History Teacher Readiness in Applying Historical Thinking Skills in Secondary School. *Yupa: Historical Studies Journal*, 1(2), 113-122. <https://doi.org/10.26523/yupa.v1i2.42>
- Sanclemente-Tellez, J. (2017). Marketing and Corporate Social Responsibility (CSR). Moving between broadening the concept of marketing and social factors as a marketing strategy. *Spanish Journal of Marketing - ESIC*, 21(1), 1–22. <https://doi.org/10.1016/j.sjme.2017.05.001>
- Sekaran, U., & Bougie, R. (2016). *Research Methods for Business: A Skill Building Approach*. 7th ed. West Sussex: John Wiley & Sons Ltd.
- Servaes, H., & Tamayo, A. (2013). The Impact of Corporate Social Responsibility on Firm Value: The Role of Customer Awareness. *Management Science*, 59(5), 1045–1061. <https://doi.org/10.1287/mnsc.1120.1630>
- Steg, L., & Vlek, C. (2009). Encouraging Pro-Environmental Behavior: An Integrative Review and Research Agenda. *Journal of Environmental Psychology*, 29, 309–317. <https://doi.org/10.1016/j.jenvp.2008.10.004>
- Stegall, N. (2006). Designing for Sustainability: A Philosophy for Ecologically Intentional Design. *Design Issues*, 22(2), 56–63. <https://doi.org/10.1162/desi.2006.22.2.56>
- Stern, P. (2000). Toward a Coherent Theory of Environmentally Significant Behavior. *Journal of Social Issues*, 56(3), 407–424. <https://doi.org/10.1111/0022-4537.00175>
- Suganthi, L. (2019). Examining the Relationship Between Corporate Social Responsibility, Performance, Employees' Pro-Environmental Behavior at Work with Green Practices as Mediator. *Journal of Cleaner Production*, 232, 739–750. <https://doi.org/10.1016/j.jclepro.2019.05.295>
- Tian, Q., & Robertson, J. L. (2019). How and When Does Perceived CSR Affect Employees' Engagement in Voluntary Pro-Environmental Behavior? *Journal of Business Ethics*, 155(2), 399–412. <https://doi.org/10.1007/s10551-017-3497-3>
- Ture, R. S., & Ganesh, M. P. (2014). Understanding Pro-Environmental Behaviours at Workplace: Proposal of a Model. *Asia-Pacific Journal of Management Research and Innovation*, 10(2), 137–145. <https://doi.org/10.1177/2319510x14536219>
- Turker, D. (2009). Measuring Corporate Social Responsibility: A Scale Development Study. *Journal of Business Ethics*, 85(4), 411–427. <https://doi.org/10.1007/s10551-008-9780-6>