The Enablers of Pro-Environmental Behaviour among Bank Employees: Awareness or Knowledge?

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Abstract. Business can serve an important role in making the environment more sustainable. The goal of this study was to examine environmental knowledge and environmental awareness as influential components to pro-environmental behavior, specifically in the banking industry. The banking industry has established official sustainability laws requiring all companies to begin focusing on sustainability issues in their business activities. The study utilized Structural Equation Modeling (SEM). The first hypothesis was supported significantly. As a result of the first hypothesis analysis, bankers' pro-environmental behavior is substantially influenced by environmental awareness. The second hypothesis analysis found that environmental knowledge can positively boost pro-environmental behavior among bankers. However, it has been statistically proven yet insignificantly.

1 Introduction

Climate change, ozone depletion, deforestation, ecological devastation, and biodiversity loss are just a few of the concerns that have got much attention. As the role of businesses in environmental protection becomes more important, businesses must become more environmentally responsible. Organizations must adjust their business practices to include environmental protection and appropriate natural resource management [1].

Business has a big role to play in making the world more sustainable. It is because all companies, regardless of location and industry, must use and utilize natural resources in their activities and produce waste, including CO2 [2].

Businesses must also take greater accountability for environmental protection and implement approaches to environmental and natural resource management [3]. As the environmental environment has deteriorated in recent years, many companies have begun to pay attention to and participate in environmental problem-solving approaches [4].

Business sustainability is defined as "the ability of firms to respond to their short-term financial needs without compromising their (or others') ability to meet their future needs" [5]. To overcome the economic crisis and achieve sustainable economic growth, all businesses worldwide must play critical roles in providing pro-environmental activities. Furthermore, it implies that any business entity has an obligation to improve their employees' capacities for sustainable development [6].

The Financial Services Authority (OJK) in Indonesia urged that the financial services sector must also supporting the world in achieving Sustainable Development Goals (SDGs). Therefore, they have to adopt a sustainable finance approach.

The OJK has developed a Phase I Sustainable Finance Roadmap for 2015-2019 and a Phase II Sustainable Finance Roadmap for 2021-2025 to accelerate the implementation of ESG principles in Indonesia. It will serve as guidelines for the financial services sector and ministries in implementing sustainable finance [7].

Green Taxonomy is one of the essential components in the roadmap. It categorizes sectors based on business activities. Furthermore, it supports environmental initiatives and mitigation and adaptation to climate change. It can be used as a reference in the harmonizing understanding of green business activities [7].

Furthermore, employees are business assets, capable of implementing high-level sustainability plans. Therefore, every company seeking to improve its environmental performance should encourage its employees to engage in pro-environmental behaviors [3], [5], [8].

Employee collaboration is required for the implementation of corporate green policies. However, most organizational employees lack of interest in environmental issues. In this context, firms and scholars are increasingly interested in the elements that influence employees' pro-environmental behavior [5], [9].

To implement pro-environmental behavior, individuals need to know in advance what is happening to the earth and be aware of the importance of preserving the environment. Environmental awareness is understanding environmental conditions and the importance of protecting the environment. Environmental awareness can make a person aware of the urgent need to take real and immediate action to stop damage and preserve the environment [10]. Besides, environmental knowledge also plays an important role in supporting pro-environmental behavior. Environmental knowledge is knowledge about environmental problems and solutions to overcome them [11].

There are many previous studies related to pro-environmental behavior. [12] conducted a study in the banking industry about the relationship between

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Corporate Social Responsibility (CSR) in shaping employee pro-environmental behavior (PEB) in the era of Industry 4.0. The study found CSR positively related to PEB. Similar analyses were conducted by some scholars. [1] proved that environmental knowledge and awareness directly and significantly influence pro-environmental behavior. However, research by [13] did not find a significant relationship between environmental knowledge and employee pro-environmental behavior. Another study conducted by [14] also found that environmental awareness has an insignificant effect on positive anticipated affect. In contrast, positive anticipated affect has a positive and significant impact on pro-environmental behavior. It shows that their findings do not align with those of [1].

To the best of our knowledge, few previous research has proposed an empirical study exploring environmental knowledge and environmental awareness as the enablers of pro-environmental behavior, specifically in the banking industry. However, the banking industry has published official sustainability regulations that require all businesses to begin focusing on sustainability issues in their business activities. Therefore, this paper, in this sense, provides a novel perspective on pro-environmental behavior in the workplace, specifically in the banking industry. Moreover, the goals of this study are as follows: first, to determine the positive and significant effect of environmental knowledge on pro-environmental behavior among bank employees. Second, to ascertain whether environmental awareness positively and significantly affects pro-environmental behavior among bank employees.

2 Literature Review

2.1 Environmental Knowledge

Environmental knowledge is knowledge about environmental problems and possible solutions. [15]. According to [16], environmental knowledge is the degree of understanding of factors that affect the health and sustainability of the ecosystems in which we live.

Environmental knowledge denotes knowledge of environmental problems and solutions, where this knowledge has a significant influence on individual decision-making. Someone knowledgeable about environmental issues is likelier to exhibit environmentally conscious behavior [1]. Individuals who exhibit environmental knowledge comprehend the world and the factors that influence it [17].

Individual understanding of the environment and pressing environmental issues, such as climate change, deforestation, and marine pollution from non-biodegradable waste, is called environmental knowledge [18]. Environmental knowledge is also associated with the information that people have to determine and confirm environmental issues and the ability to transform this knowledge into influential behavior [19].

Knowledge can be an essential factor in the success of pro-environmental actions [20], [21]. It implies that knowledge shows how individuals demonstrate their own environmental responsibility, which leads to the individual's environmental behavior.

2.2 Environmental Awareness

Environmental awareness is defined as an individual's ability to comprehend the nature of environmental processes and issues. In addition, it concerns for environmental quality, and the extent to which they commit to environmentally responsible behavior in their daily lives [4], [22].

Environmental awareness is a multidimensional notion that has been shown to affect environmental information, knowledge, attitudes, tendencies, behaviors, intentions, efforts, and individual actions. A person with greater environmental awareness is expected to comprehend the importance of environmental protection for human welfare. The "4Rs" of environmental consciousness are reduced, reuse, recycle, and rethink [23], [24].

Environmental awareness is a critical step in preparing individuals to solve environmental issues. This is since environmental awareness shows people's knowledge and concern about their environmental behavior. More ecologically conscious individuals tend to be more environmentally conscious, and vice versa. As a result, environmental awareness is one of the primary causes for implementing pro-environmental behavior [3], [25].

2.3 Pro-Environmental Behavior

Individuals who engage in pro-environmental behavior to minimize environmental damage and preserve the environment purposively [8], [26], [27]. Changes in human behavior can help improve the management and resolution of many environmental problems. Human activities and environmental behavior on earth play an essential part in the sustainability of the earth [28], [29]. Significant environmental behavior such as double-sided printing and turning off lights when exiting a room are two examples of this type of behavior at work. [3], [30].

Environmental behavior can be practiced in both public and private sectors. Both of them require equal attention because both types of behavior can help to reduce environmental issues. Besides, individuals can help to safeguard the environment by changing their personal behavior [24], [31]. People can help reduce environmental issues directly or indirectly by actively participating in various environmental efforts and saving water or electricity [24], [28], [31].

One must first develop a habit of one's own in attaining pro-environmental behavior, such as turning off the water tap when washing one's hair or brushing one's teeth [27], [32], [33]. Internal factors such as environmental awareness, values, attitudes, and external factors such as social standards and interpersonal interactions can influence pro-environmental behavior. In addition, environmental knowledge and motivation impact a person's pro-environmental behavior [27], [32]–[34].

2.4 The Relationship between Environmental Awareness and Pro-Environmental Behavior

Environmental awareness is significantly related to environmental commitment, according to research conducted by [35] in the food and beverage industry.

Furthermore, the study found environmental commitment positively influences pro-environmental behavior.

[26] also discovered that students with high environmental awareness showed more pro-environmental behavior. For example, the study in Malang, Indonesia, reported that a high level of environmental awareness impacts pro-environmental behavior.

Another study by [36] in software and banking industries in Thailand shows that environmental awareness moderates the relationship between workplace spirituality and environmental vigor. Where environmental enthusiasm has a positive influence on pro-environmental behavior.

Another research conducted by [37] in 62 countries found that environmental awareness influences behavior and encourages environmental investment and spending. In addition, countries with a more aware society of environmental threats have considerably more resources available to address environmental threats.

[38] Research in 10 different sites in China found that the level of environmental consciousness significantly impacts pro-environmental vehicle choice.

2.5 The Relationship between Environmental Knowledge and Pro-Environmental Behavior

[39] conducted research in Jeju Island explained that there is an influence between environmental knowledge on pro-environmental behavior among Jeju Island tourists. The study also shows that someone with high environmental knowledge can carry out more environmentally responsible behavior than someone with low environmental knowledge.

Research [40] shows that environmental knowledge influences Chinese people's purchase intention and willingness to buy green rice. The study was conducted in China: Guangzhou, Wuhan, and Lanzhou.

According to the findings of [15], [41] study, students with high levels of environmental knowledge are more likely to engage in direct pro-environmental behavior. Even though the relationship is not strong. As a result, it is suggested that formal and informal environmental education be given to encourage student participation in pro-environmental behavior that has a direct effect. This research also confirms that different types of environmental knowledge influence distinct types of pro-environmental behavior.

After conducting a comprehensive literature review, the researchers developed the following hypotheses.

H1 *Environmental awareness influences pro-environmental behavior among private bankers significantly.*

H2 *Environmental knowledge influences pro-environmental behavior among private bankers significantly.*

3 Methodology

The study aims to provide an empirical analysis of the enablers of pro-environmental behavior (PEB) among bank employees in Jakarta, Indonesia. The proposed enablers are environmental knowledge and environmental awareness.

The study began with the theoretical review, then hypothesis generation, sample data collecting, and confirmation of the analytical outcomes using the Structural Equation Modeling (SEM) analysis with SmartPLS 3.2.9 software.

4 Findings and Discussion

4.1 Descriptive Analysis

The study wants to examine the influence of environmental knowledge and environmental awareness on pro-environmental behaviors of bank employees in Jakarta, Indonesia. It is a descriptive quantitative study. The study took about six months to complete, starting in February to June 2022.

This study used a quantitative design to conduct empirical research. All items were graded on a five-point Likert scale, one indicating strongly disagree and five indicating strongly agree. The questions used to measure environmental awareness were adapted from [1], [4], [22], [42]–[45], consisting of 10 indicators. Then, the questions used to measure environmental knowledge were adapted from [1], [17], [22], [35], [42], consisting of 10 indicators. The questions used to measure pro-environmental behavior were adapted from [1], [17], [21], [22], [28], [35], [46], consisting of 9 indicators.

The sampling technique used in this study was non-probability sampling with a purposive sampling technique, that is, a sampling technique with specific considerations. The selected sample is adjusted to specific criteria due to concern. This study uses the sample chosen as bank employees living in Tangerang and Jakarta.

There are 58.3% male and 41.7% female employees among the respondents. Their age ranges from 19 to 30 years old for 63.9.3%, and 31 to 50 years old for the rest. Their educational level is 95.8% bachelor's degree and the rest diploma. 83.2% of respondents have less than five years of experience. Their working level is 84.7% staff up to management.

4.2 Structural Equation Modelling Analysis

According to [47]–[49], the loading factor should be more than 0.70. The reliability of internal consistency must then be assessed. Two indicators corroborate this: composite reliability and Cronbach's alpha. The value must be equal to or greater than 0.50 [47]–[49]. An indicator of convergent validity is the average variance extended (AVE). The lowest and maximum threshold values are 0.50 and higher [47]–[49]. Table 1 shows the outer-loading value and the reliability and validity scores that meet the measurement's standards.

Table 1. Loading Factor

	EA	EK	PEB
EA1	0.893		
EA2	0.754		

	EA	EK	PEB
EA3	0.824		
EA4	0.846		
EA5	0.840		
EA6	0.830		
EA7	0.814		
EA8	0.856		
EA9	0.751		
EA10	0.785		
EK1		0.720	
EK2		0.740	
EK3		0.851	
EK4		0.768	
EK5		0.823	
EK6		0.869	
EK7		0.880	
EK8		0.877	
EK9		0.865	
EK10		0.883	
PEB1			0.861
PEB2			0.874
PEB3			0.823
PEB4			0.867
PEB5			0.896
PEB6			0.832
PEB7			0.857
PEB8			0.886
PEB9			0.826

Based on the results of the loading factor, it can be seen that all indicators have a value of > 0.70 after removing two indicators, namely PE10 and PE11, which have a loading factor <0.70. Therefore, all indicators are valid [47]–[49].

Table 2. Construct Reliability and Validity

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
EA	0.946	0.949	0.954	0.673
EK	0.949	0.956	0.956	0.688
PEB	0.955	0.960	0.962	0.736
EA	0.946	0.949	0.954	0.673

Based on the AVE value results, all constructs are greater than 0.50, indicating that they meet the requirements for construct validity. This is also supported by the Composite Reliability value greater than 0.70, implying that all construct indicators are reliable [47]–[49].

The coefficient of determination explains how the independent variables influence the dependent variable. The R-square results demonstrate this coefficient of determination [47]–[49].

Table 3. Construct Reliability and Validity

	R Square
Pro Environmental Behavior	0.432

Table 3 shows that pro-environmental behavior has an R-square value of 0.432. It demonstrates that 43.2% of pro-environmental behavior is influenced by variable environmental awareness and environmental knowledge.

Table 4. Construct Reliability and Validity

	O	M	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	*P* Values
H1	0.543	0.549	0.275	1.972	0.024
H2	0.124	0.128	0.258	0.480	0.316

O: original sample M: sample mean

The results of hypothesis testing are summarized in Table 4. The first hypothesis (H1) is significantly accepted. The results show that the T statistics value is 1.972, greater than 1.96, and the P values of 0.024 are less than 0.05. So, the first hypothesis analysis found environmental awareness influences pro-environmental behavior among private bankers significantly [47]–[49].

The second hypothesis (H2) is statistically declined. The results show that the T statistics value is 0.480, smaller than 1.96, and the P values of 0.316 are more than 0.05. The second hypothesis analysis found environmental knowledge positively influences pro-environmental behavior among private bankers even though insignificantly [47]–[49]. The first finding can support the previous study [11], [26], [35], [50]–[52]. However, both enablers positively influence the pro-environmental behavior among bank employees.

The results (figure 1) also show that environmental awareness has a higher influence (54.3%) than environmental knowledge (12.4%). It means environmental awareness can be a significant enabler for the pro-environmental behavior of bank employees. While environmental knowledge merely cannot be a statistically significant enabler for pro-environmental behavior. It implies environmental knowledge will be meaningless unless it is accompanied by the environmental awareness.

Referring to the findings, companies can enhance their environmental performance by implementing pro-environmental roles and responsibilities. In other words, a company can make obligatory pro-environmental behavior as green behavior performed within the context of required work responsibilities for employees. It entails adhering to organizational regulations, modifying work procedures, selecting responsible alternatives, and developing sustainable products and processes. The concept of required pro-environmental behavior is related to task performance, which refers to employee pro-environmental behavior required by their employer. Therefore, they can contribute directly or indirectly to the core business.

Meanwhile, a corporation can create a pro-environmental behavior reward system for employees who go above and beyond what the organization requires regarding pro-environmental behavior. Again, a personal initiative that exceeds organizational expectations is involved. It is all part of prioritizing environmental concerns, launching environmental programs and regulations, lobbying and campaigns, and encouraging others.

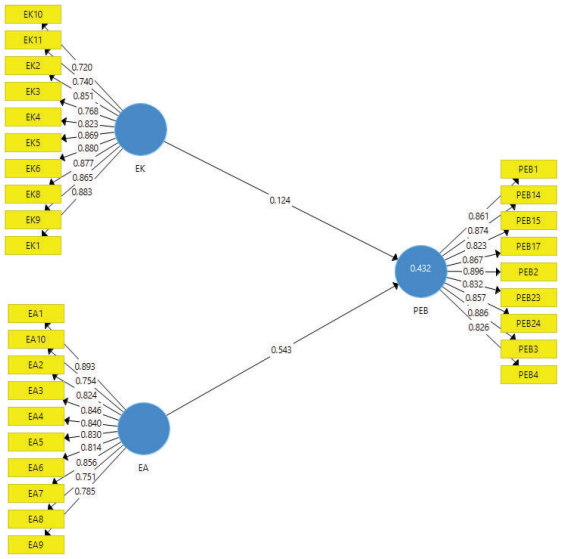

Fig. 1. Path Coefficients

5 Conclusion

A business might have a significant role in making the planet more sustainable. This study aimed to analyze environmental knowledge and environmental awareness as enhancers of pro-environmental behavior, specifically in the banking business. Official sustainability laws have been published by the banking industry, requiring all enterprises to begin focusing on sustainability issues in their business activities. The findings show the first hypothesis is strongly supported. As a result, the first hypothesis analysis discovered that environmental awareness strongly influences pro-environmental behavior among private bankers. The second hypothesis has been statistically disproved. The second hypothesis analysis found that, albeit insignificantly, environmental knowledge promotes pro-environmental behavior among private bankers.

This study still has certain limitations. Future research should focus on the consequences of pro-environmental behavior on individual and organizational performance. It is also essential to examine the results of the pro-environmental behavior variable in other industrial sectors, such as manufacturing and services. Other factors, such as motivation, organizational culture, and leadership, should also be considered. These additional aspects might serve as a mediator or moderator in the relationship between environmental awareness, environmental knowledge, and pro-environmental behavior.

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