GREEN TRAINING AND VOLUNTARY GREEN BEHAVIOR OF EMPLOYEES IN CAN THO CITY: THE MEDIATING ROLE OF AWARENESS OF GREEN WORKING ENVIRONMENT AND JOB SATISFACTION

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Abstract

The study was conducted to analyze the mediating role of green working environment awareness and job satisfaction on the relationship of green training and voluntary green behavior of employees in Can Tho city based on survey data from 120 employees. The results of PLS-SEM show that green training has a positive effect on the awareness of the green working environment and job satisfaction of employees. Besides, the statistical evidence also shows that green training and awareness of green working environment have an effect on voluntary green behavior of employees. In addition, the awareness of green working environment is documented as a mediator for the relationship between green training and voluntary green behavior. Based on these results, some managerial implications are proposed to promote green behavior of employees in the workplace. Specifically, the enterprise should organize training programs related to the environmental activities for employees. In addition, the enterprise should invest more in green training, should publish a common workplace policy and encourage green behavior as well as should organize programs to maintain the awareness of green working environment of employees.

Keywords: Awareness of green working environment, green training, job satisfaction, voluntary green behavior

1. INTRODUCTION

Currently, the issue of environmental protection is one of the top concerns because it has a significant impact on the sustainable development trend of countries around the world. In recent years, environmental problems, such as pollution, ecological degradation and global warming, are posing serious challenges to the world. Thus, protecting the ecological environment and fighting towards environmental sustainability is a new mission of organizations (Zhang et al., 2021). Industrial processes and their destructive effects threaten the global environment as well as economic and social development. These environmental risks have made businesses tend to focus on green activities, start to educate and train employees on green activities (Darvishmotevali and Altinay, 2022). The green behavior of employees could bring positive impacts to the environment, towards the goal of sustainable development, which is also a common goal of businesses around the world today (Nga and Hau, 2021).

Over the past years, in order to cope with the increasing environmental degradation, Vietnam has issued many policies to promote sustainable development, typically National strategy on green growth for the period 2011-2020 and vision to 2050 has been approved by the Prime Minister in Decision 1393/QD-TTg. Along with the trend of sustainable development and environmental protection, Can Tho City with many potentials and favorable conditions, the most developed city in the Mekong Delta, is making more efforts in green human resource management to improve the impact on employees' awareness of the environment and implement voluntary green behaviors. To meet the needs of socio-economic growth in the coming period, organizations and businesses need to promote action programs and promote economic use of energy in the community, thereby both bringing economic benefits and contributing to the effective implementation of the goal of green and sustainable economic growth in the Mekong Delta.

Nga and Hau (2021) Has shown that green human resource management has a positive impact on green motivation and green behavior of employees. Pham et al. (2018) Also recognized green training as an important green practice that can help improve voluntary green behavior of employees. However, studies analyzing the impact of green training on employee behavior through the mediating role of awareness of green working environment and job satisfaction have not been received much intention. Training related to environmental protection is one of the important green initiatives globally to increase employee commitment and satisfaction (Amrutha and Geetha, 2021). Green training develops a green way of life and creates a friendly, cost-effective green working environment due to more efficient use of energy, water and raw materials. Besides, green training also increases business opportunities of enterprises as some government agencies, commercial enterprises and non-profit organizations require only businesses that meet specific green standards can cooperate with them.

Therefore, studies on the influence of green training on voluntary green behavior of employees are very urgent and have practical significance for Vietnam's sustainable development trend in the context of globalization. The results of this study is expected to provide organizations and businesses with valuable information on how green training affects the voluntary green behavior of employees. Since then, organizations could focus on training green knowledge and skills for employees, thus creating opportunities for them to apply their knowledge of environmental protection in their work. Moreover, leaders in organizations and businesses can come up with green training policies to promote voluntary green behavior of employees in the future.

2. THEORETICAL FOUNDATIONS AND PROPOSED RESEARCH MODELS

2.1. Green training

According to Amrutha and Geetha (2021), green training is the most popular green practice method on creating knowledge and environmental awareness for employees in green human resource management. Green training produces sustainable results such as green innovation and organizational behavior towards the environment. Green training can also contribute to the voluntary green behavior of employees. Besides that, Pinzone et al. (2019) define green

training as a process of on-the-job training and continuing education which is designed to achieve corporate environmental management goals and objectives. Among green human resource management practices, green training is one of the most performed activities in organizations and is also recognized as an important activity for successful implementation of environmental management.

Green training includes implementing orientation programs aimed at raising employees' green awareness (Aboramadan and Karatepe, 2021). Green training is identified as a means to improve environmental performance because green training enhances employees' efforts towards the environment and is considered a type of training on environmental topics which allow all employees to integrate company work with environmental issues. The three important elements of green training include knowledge management, green awareness and activities related to environmental protection.

2.2 Green behavior

Green behavior in the workplace includes activities such as recycling, waste management and minimization, energy consumption reduction or any other conscious behavior aimed at minimizing negative impacts on the environment. Any behavior that has a positive effect on the environment is called green behavior or pro-environmental behavior (Al-Swidi et al., 2021).

Green behavior or environmental behavior is geared towards human behavior that minimizes the negative environmental consequences of their activities in the workplace and leads to sustainable performance of organization. There are many studies that use different names to refer to employees' green behavior such as organizational citizenship behavior towards the environment, voluntary green behavior at work or environmentally friendly behavior. This shows a lack of consensus on the concept of employee green behavior from various perspectives (Rubel et al., 2021).

Green behavior in the workplace is classified into mandatory and voluntary green behavior. Mandatory green behavior is defined as the degree to which employee's complete required tasks in ways that conserve resources and protect the surrounding environment, such as the application of green craft or the selection of environmentally friendly substitutes. Mandatory green behavior reflects the process of completing role-based tasks related to environmental protection. Meanwhile, voluntary green behavior is defined as employee environmental behavior that is discretionary and goes beyond the scope of duties within the role, such as turning off the power when leaving the office or recycling reusable resources in the workplace (Zhang et al., 2021). Amrutha and Geetha (2021) Argue that voluntary green behaviors in the workplace of employees are informal behaviors in the workplace towards the sustainability of the organizational environment including green goes beyond its role as reducing electricity consumption, reusing and recycling office supplies wherever possible in the workplace.

2.3 Awareness of green working environment

The green working environment is an important organizational context factor, The working environment closely affects the attitude and behavior of employees in general and is a relatively

important factor affecting the green behavior of employees (Rubel et al., 2021). Awareness of green working environment involves an employee's understanding of the core values and goals that drive employee behaviors and have important contributions to the values and specific goals of the organization. Creating awareness about green work environment reflects how the organization and its members value green activities towards sustainability. In this respect, researchers clarify that employees' environmental perceptions of the organization and their colleagues can shape their views on the organization's values and goals related to its ability to preserve protect the environment and behave appropriately. At its core, green workplace awareness is an employee's perception of the organization and their colleagues towards environmental sustainability (Rubel et al., 2021). Perception is a process of acquiring and processing information. When employees are aware of the general environmental protection that the company is aiming for, it means that they are motivated to move from a sense of self-consciousness to responsibility. Employees can learn new things and think more efficiently through teamwork, from which they can come up with creative ideas to reduce consumption and waste of resources.

2.4 Job satisfaction

There are many different definitions of employee satisfaction at work. These definitions often favor the emotional or mental state of the person. Locke (1976) Stated that job satisfaction is "a happy and positive state resulted from an employee's evaluation of his or her own job or its experiences". In addition, Spector (1997) defines "Job satisfaction is the fact that employees have their needs or desires met at work" or "Job satisfaction is simply how people feel enjoy their work and aspects of their work".

Job satisfaction is a positive response corresponding to the degree to which an individual enjoys his or her job (Pinzone et al., 2019). Job satisfaction is closely linked with individual behavior in the workplace. This means that if an individual is satisfied with the job they are undertaking, they will have positive behaviors in the workplace. Thus, in simple terms, employee job satisfaction can be defined as the positive level of emotions or attitudes that they have towards their work and job satisfaction is measured in different ways. When a person says they have high job satisfaction, it means that they really like their job, feel good about it and appreciate their work.

2.5 Proposed research model

The proposed research model will expand the AMO theory (Pinzone et al., 2019, Yu et al., 2020, Moradeke et al., 2021) by adjusting the scales in accordance with the context of the study.

➢ **Green training and voluntary green behavior**

Green training includes environmental policies that provide employees with the knowledge, skills and attitudes necessary to achieve the organization's environmental goals. Green training promotes the spread of environmental values, improves awareness of environmental problems,

understands and minimizes negative impacts on the environment as well as encourages employees to implement voluntary green behaviors (Pham et al., 2019).

According to Amrutha and Geetha (2021), green training is a mechanism to improve employee problem-solving ability to develop solutions to deal with environmental problems and to adjust environmental protection strategies to meet the organization's sustainability goals. Green training is one of the most effective green practices of green human resource management promoting environmental performance (Jabbour and de Sousa Jabbour, 2016). Voluntary green behavior represents the eco-initiative aspect of civic behavior organization and includes green behaviors beyond the role. Green training could make employees aware of activities such as energy conservation, electricity consumption reduction, and reuse and voluntarily respond to green behavior.

The main impact of green training is to raise awareness among managers and employees about working activities and day-to-day decisions that can affect the environment, provide employees with the ability to identify environmental issues, understand and manage the complexity of environmental topics. This could help employees fulfill their environmental responsibilities and achieve the organization's environmental management goals (Pinzone et al., 2019). Many previous research show that green training is a strong influence on voluntary green behavior of employees such as Norton et al. (2014) or Pinzone et al. (2019). So the following hypothesis is proposed:

H_1: Green training has a positive effect on voluntary green behavior of employees.

➢ Green training and awareness of green working environment

Green training is a practice that enhances ability (Renwick et al., 2013), and helps to improve employees' awareness, knowledge and skills related to green as a basis for some solutions to reduce environmental impact (Pinzone et al., 2019). Dumont et al. (2017) Argues that green human resource management practices (including green training) are necessary to increase the effect on employees' environmental behavior when their companies focus more on creating a green environment at work. In fact, in organizations with a green culture, employees often have the opportunity to be trained the necessary knowledge and skills and be participated in green activities. Therefore, green training helps improve the knowledge and ability of employees on environmental issues, helps them realize that the organization has focused on green training and capacity development. At the same time, green training also helps them understand more clearly the sustainable green development policies of enterprises. As a result, green training could contribute to the formation of a green working environment. Hence, the following hypothesis is proposed:

H_2: Green training has a positive effect on employees' awareness of green working environment.

➢ Awareness of green working environment and voluntary green behavior

Awareness of green working environment considers the role of green work environment in green behavior of employees. When there is a green environment in the workplace, employees

could find that green activities are encouraged and expected by organizations (Norton et al., 2014). Previous research has shown that perception of a green work environment affects employees' attitudes and behaviors. For example, a business that values the environment might establish an environmental regulation. Employees feel that they can meet the company's needs while being environmentally conscious. As a result, they are more likely to engage in green actions. Besides, if they observe that their colleagues are environmentally conscious and environmentally friendly, they are able to be motivated and could be ready to comply and implement green behavior in the workplace (Waqas et al., 2021). Therefore, the following hypothesis is proposed:

H_3: Awareness of green working environment has a positive influence on voluntary green behavior of employees.

➢ **Green training and job satisfaction**

Organizations invest in training to develop employees' competencies, helping employees perceive a full match between their competencies and job requirements, thereby developing a more satisfied outlook about their work. Green training gives employees the ability to enhance their competence on environmental topics. This improved condition positively affects employees' perceived job evaluation because they may feel that the organization is providing them with the environmental knowledge and skills required by the tasks which they perform. In addition, green training can create a positive spillover into employees' private lives. Thanks to green training, employees have the opportunity to learn about the relevance of their daily work behaviors to the environment. They are likely to be more aware of the relevance of their personal behaviors outside of the workplace. Therefore, it can be expected that employees participating in green training will be able to feel that the organization is providing them with a green personal resource, which can be useful not only while they are working but also in their private lives. From there, they become more satisfied with their work (Pinzone et al., 2019). So the following hypothesis is proposed:

H_4: Green training has a positive effect on job satisfaction of employees.

➢ **Job satisfaction and voluntary green behavior**

Green satisfaction will create a sense of daily achievement when doing green activities in the workplace. Individuals with a positive attitude towards greening perform better on the organization's environmental responsibilities. This positive attitude is either satisfaction with their previous job or a positive emotional state resulting from their work experience. Previous research has demonstrated that job satisfaction has a positive developmental impact on employees' voluntary green behavior (Amrutha and Geetha, 2021). However, so far there has been very little research on the relationship between job satisfaction and voluntary green behavior. According to social exchange theory, it can be argued that when employees are more satisfied with their jobs, they tend to act with the aim of repaying the organization that has benefited them through voluntary green behavior, a beneficial behavior for the sustainable development of the organization (Jiang et al., 2012, Moradeke et al., 2021). Based on this argument, the following hypothesis is proposed:

H_5: Employee's job satisfaction has a positive influence on voluntary green behavior.

> **The mediating role of green work environment awareness on the relationship between green training and voluntary green behavior**

According to Norton et al. (2014), a green working environment can help employees better understand organizational attributes and behavioral norms in a company related to environmental sustainability. The positive effects of green human resource management on employees' green behavior can be indirectly through the awareness of green working environment. When there is a green working environment, employees could find that green activities and behaviors are encouraged and expected by the organization. Therefore, they are more likely to engage in green activities (Zhang et al., 2021). The green working environment is effective when there is interaction between other employees in the workplace. If employees perceive that their co-workers practice environmentally friendly green behaviors in the workplace, it will stimulate them to also adopt environmentally friendly behaviors. Rubel et al. (2021) Have shown that a green working environment is associated with environmental behavior, which is an intermediary between green human resource management and environmental behavior. Therefore, the following hypothesis is proposed:

H_6: Awareness of green working environment has an intermediate influence on the relationship between green training and voluntary green behavior of employees.

> **The mediating role of job satisfaction on the relationship between green training and voluntary green behavior**

Organizations invest in training to develop employees' competencies and support employees to fully realize the match between their capabilities and job requirements. Green training could give employees the ability to increase their capacity on environmental issues. Hence, employees have the opportunity to learn about how their daily tasks relate to environmental behaviors. As a result, they are likely to be more aware of the relevance of their personal behavior outside of the workplace (Pinzone et al., 2019). According to AMO theory, green human resource management leads to better job satisfaction and develop the commitment to environmental behaviors of the organization. Green training provides skills and attitudes that could enhance employees' positive environmental behavior (Amrutha and Geetha, 2021). When individuals have a positive attitude towards greening, they are better able to fulfill the organization's environmental responsibilities. Amrutha and Geetha (2021) Have provided the evidence that job satisfaction has a positive developmental impact on employees' voluntary green behavior. According to the social exchange theory, employees who are satisfied with their jobs tend to exhibit positive and reciprocal behaviors such as the voluntary green behaviour. Some studies support this idea of reciprocity between the most satisfied employees with the organization and the behavior towards the environment (Moradeke et al., 2021). Based on this argument, the following final hypothesis is proposed:

H_7: Job satisfaction has an intermediate influence on the relationship between green training and voluntary green behavior of employees.

From the above-stated hypotheses, the proposed research model is combined displaying in Figure 1 in the result section. The research scale are built on the basis of inheriting those scales from previous studies. However, it will be adjusted and supplemented to suit the research context in Can Tho City. In order to save space, the research scales are combined presented in the results of EFA analysis (Table 1).

3. RESEARCH METHODS

3.1 Data collection

The topic uses primary data through surveying employees in Can Tho city by the structure questionnaires. According to Hair et al. (1998), when using EFA the ratio of the number of observation and measurement variable should be 5:1. Moreover, to have the reliability in testing the suitability of the SEM model, the sample size is required from 100 – 200 (Hoyle, 1995). Thus, a sample size of 120 samples is decided. The sample is collected by the convenience sampling method.

3.2 Methods of data analysis

First, the study will evaluate the reliability of the research scale using Cronbach's Alpha coefficient before using Exploratory Factor Analysis (EFA) method next, the confirmatory factor analysis (CFA) method was used to confirm the unidirectionality, convergence value and discriminant value of the scale. Then, partial least square – Structural equation modeling (PLS-SEM) is used to test the expected relationships in the research model. The PLS-SEM model has the advantages of avoiding problems related to small sample size, non-normally distributed data and being able to estimate complex research models with many intermediate and latent variables. Later, the bootstrap is performed to measure the reliability of the estimates in the model.

4. RESULTS AND DISCUSSION

4.1 Data description

After conducting the survey, the study obtained 120 valid questionnaires. The ample has 68 male employees (accounting for 56.7%). The age of employees ranges from 18 to 45 years old. The majority of workers surveyed have a university degree. Regarding the occupation, the highest proportion is office staff (72.5%). There are 38 employees with less than 1 year working experience (accounting for 31.7%), followed by 37 employees from 1 to under 3 years (accounting for 30.8%), 24 employees from 3 to under 5 years (accounting for 20.0%) and finally 21 employees with 5 years or more (accounting for 17.5%).

Employees have performed various green behaviors in the workplace. The majority of employees put their garbage in the right place (accounting for 99.2% of the sample). The general hygiene behavior has been done at the workplace by all surveyed employees. There are 92.5% surveyed employees turning off the lights and the fans when leaving the workplace. In addition, there are 74 respondents planting trees at work (accounting for 61.7%). The use of

recyclables when possible was done by 41.7% of surveyed employees. The lowest percentage is the use of green transportation such as walking, bicycle or bus when going to the workplace (account for 10.0%).

5. RESULTS OF ANALYSIS AND DISCUSSION

5.1 EFA analysis results

After conducting Cronbach's Alpha reliability analysis, all observed variables have the required reliability. Thus, the study continues to perform EFA. When performing EFA for the first time, the model has removed the HL4 variable of the factor job satisfaction because the factor loading factor is less than 0.5. The EFA results for the second times is detailed in Table 1. The total variance extracted of the 4 factors is 69.561%, which shows that the extracted factor could explain 69.561% the variation of data. The results in Table 1 show that the model has no change of observed variables among factors compared to the original proposed research model.

Table 1: Results of the 2nd EFA analysis

No.	Observed variable code	Observed variables	Factors			
			1	2	3	4
Awareness of green working environment						
1	MT6	In the company, employees try to minimize the harm to the environment	0.929			
2	MT4	In the company, employees care about environmental issues	0.895			
3	MT5	In the company, employees are interested in acting in environmentally friendly ways	0.824			
4	MT1	The company believes that it is important to protect the environment	0.786			
5	MT2	The company publishes general policies on environmental protection in the workplace	0.747			
6	MT3	The company implements special programs to minimize negative impacts on the environment	0.730			
Green training						
7	DT1	Green training is a top priority in the organization		0.945		
8	DT5	Providing the right green training program		0.851		
9	DT3	Organizing environmental education activities for employees		0.848		
10	DT4	Provide environmental awareness training for workers		0.803		
11	DT2	Being facilitated to participate in green training		0.788		
Voluntary green behavior						
12	HV5	Voluntarily participating in projects, initiatives or events that address environmental issues inside and outside the organization			0.936	
13	HV3	Wanting to contribute to building a positive image of the organization			0.867	

No.	Observed variable code	Observed variables	Factors			
			1	2	3	4
14	HV1	Voluntarily turning off electrical equipment, sorting and recycling, reusing... at work			0.800	
15	HV4	Encourage co-workers to practice environmentally conscious behaviors			0.762	
16	HV2	Information on environmental activities in the organization is updated			0.647	
Job satisfaction						
17	HL3	Satisfied with the support to implement green initiatives in this organization				0.878
18	HL5	Satisfied with the organization's green initiatives				0.771
19	HL2	Interested in implementing green behavior currently working in the organization				0.638
20	HL1	Feeling satisfied with current job				0.595
Total extracted variance of four factors		69.561%				
KMO coefficient		0.904				
Significant level		0.000				

Source: Results of processing survey data from 120 workers in Can Tho city (2022)

5.2 Results of PLS-SEM

Before performing PLS-SEM analysis, CFA is performed to verify whether the measurement model and the scale meet the requirements. The first time CFA analysis shows that the normalized regression weights of HL5 variable of job satisfaction factor has the value being less than 0.5, so the scale has not reached the convergent value. After removing the HL5 variable and perform CFA again, the results of the second CFA analysis[1] show the suitability of the model for PLS-SEM.

5.2.1 Evaluation of the measurement model

According to Hair Jr et al. (2017), the steps to test the reliability and validity of the structure include testing for intrinsic consistency, convergent validity and discriminant validity. Reliability is assessed by outer loadings for indicators/observed variables, Cronbach's Alpha coefficient and composite reliability. Outer loadings must be greater than 0.7, Cronbach's Alpha coefficient and composite reliability (CR) must be greater than 0.7. The convergence value is evaluated by the average extracted variance coefficient AVE. The AVE coefficient must be greater than or equal to 0.5 (Hock and Ringle, 2010), which means that the average parent latent variable will explain at least 50% of the variation of each observed child variable.

The analysis results for the first time show that the variable HL3 of the job satisfaction factor and HV1 of the voluntary green behavior factor have the outer loading coefficient less than 0.7, so they are excluded. Re-analysing the model after removing the variables HL3 and HV1, the test results show that the scales have internal consistency (the external load coefficients of the variables are all greater than 0.7, Cronbach's Alpha and the combined reliability of the scales are all greater than 0.7). At the same time, the average extracted variance (AVE) of the scales are all greater than 0.5, so the research scale achieves convergent validity. In addition,

the values of HTMT index are all less than 0.85, so the constructs in the model achieve discriminant value. Next, the study also evaluates multicollinearity through the VIF coefficient. If the value of the VIF coefficient is < 5, the model does not have multicollinearity (Hair Jr et al., 2017). The analysis results show that the VIF coefficients are all factors being less than 5, so there is no multicollinearity in the model.

5.2.2 Estimation results of PLS-SEM

The estimation results in Figure 1 show that the green training has a postive effect on voluntary green behavior (the weight of 0.226 with 95% confidence level). In addition, the factor of green working environment awareness also has a positive influence on the voluntary green behavior at 1% significance level. However, there is no statistical evidence on the influence of the satisfaction factor on the voluntary green behavior of employees. These factors explain 52.1% of the variation of the voluntary green behavior.

Besides, the analysis results in Figure 1 also show that green training has a positive effect on job satisfaction (the weight of 0.530 with 99% confidence level) and green working environment awareness (the weight of 0.556 with 99% confidence level). Green training factor explains 28.1% of the variation of job satisfaction. Meanwhile, this factor explains 32% of the variation of the green working environment awareness factor.
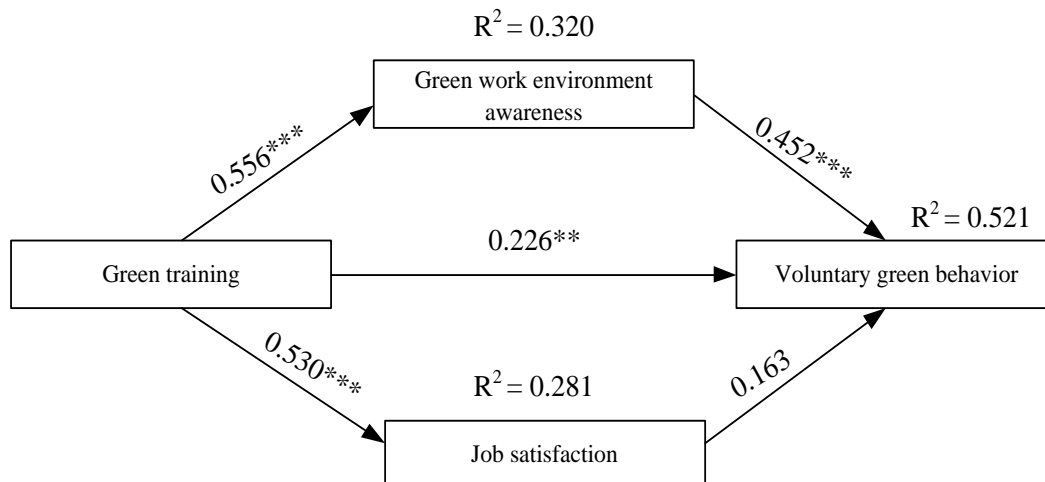

Figure 1: Estimation results of PLS-SEM

***, ** and * denote the significant level at 1%, 5% and 10%, respectively

Source: Results of processing survey data from 120 workers in Can Tho city (2022)

> **Green training and voluntary green behavior**

The estimation results in Figure 1 show that there is a positive effect of green training on the voluntary green behavior of workers in the workplace, so the evidence supports hypothesis H_1. This means that when the organization carries out environmental education activities through green training, it could motivate employees to participate in voluntary green behaviors in the

workplace. To meet the coming needs of economic growth and sustainable development, green training is an important task that most businesses need to perform to raise awareness of environmental issues to help employees understand and reduce negative impacts on the environment, thus contribute to the achievement of sustainable development goals of organizations. The results of this study are consistent with the previous studies such as Saeed et al. (2019) or Pham et al. (2018).

> **Green training and awareness of green working environment**

The estimation results in Figure 2 also support the hypothesis H_2 that green training has a positive effect on employees' awareness of green working environment. This result is similar to the study of Dumont et al. (2017) or Rubel et al. (2021).When organizations and businesses launch a strong program or activity on the environment, employees will implicitly understand that green values, green development and environmental protection are the focus of the company. By applying green human resource management through green training, it will contribute to creating a green working environment, creating environmental values and promoting awareness of employees. This could help them to identify the values of the company's green development policies and the organization's rules and procedures that they must adhere to and implement in the workplace. Employees who adopt shared green policies in the workplace can shape their perception of the organization and green values in the company. As a result, the employee could develop their perspectives and become more aware of the organization's green working environment.

> **Awareness of green working environment and voluntary green behavior**

The results also support hypothesis H_3 that the employees' awareness of green working environment has a positive effect on their voluntary green behavior. This means that the contextual factors that shape an organization's green work environment can influence employee behavior. When the employees are aware of the concern of the organization and the value of their colleagues in environmental management, this could have a strong influence on the implementation of green behaviors in their workplace. When receiving a lot of support from the organization on green initiatives in the workplace or environmentally friendly behaviors, employees are more likely to participate in voluntary green behaviors and thus contributing to the formation of a green working environment. The effect of green working environment awareness on voluntary green behavior was also found in Dumont et al. (2017).

> **Green training and job satisfaction**

Hypothesis H_4 that green training has a positive effect on job satisfaction of employees is also supported in this study. When businesses organize environmental awareness activities, employees are likely to be more aware of the relevance of their own personal behaviors in the workplace as well as outside the workplace. They could feel that green training is providing them with green personal resources that they can apply both at work and in their own lives. This can increase employee's job satisfaction. These results are similar to those of Pinzone et al. (2019) or Amrutha and Geetha (2021).

➢ **The mediating role of green working environment awareness and job satisfaction**

The estimation results in Table 2 show the mediating role of green working environment awareness on the relationship between green training and voluntary green behavior of employees. Therefore, hypothesis H_6 is supported. The results of this study are consistent with those of Norton et al. (2014) or Rubel et al. (2021). The implementation of green training programs can create environmental awareness, the interest of the organization and the value of colleagues in environmental management. This could result in a positive influence as well as promote the voluntary behavior for the environment of workers in the workplace. The mediating effect of awareness of green working environment is considered as a finding in this research context because there are very few studies related to green working environment awareness done in Vietnam. However, the statistical evidence in Table 2 does not support for the mediating effect of job satisfaction on the relationship between green training and voluntary green behavior.

Table 2: Testing results of mediating effects of green work environment awareness and job satisfaction

Hypothesis	Mediating roles	Original sample (O)	P-values	Conclusion
H_6	DT → MT → HV	0.256	0.010	Supported
H_7	DT → HL → HV	0.087	0.176	Not supported

Source: Results of processing survey data from 120 workers in Can Tho city (2022)

In order to generalize the research results, the model is tested for reliability. The study uses bootstrapping technique with a repeated sample size of 1000. The estimated results show that the test bias is not significant. Thus, it can be concluded that the estimates in the model are reliable.

6. CONCLUSION AND IMPLICATIONS

This study was conducted to analyze the mediating role of awareness of green working environment and job satisfaction on the relationship of green training and voluntary green behavior of workers in Can Tho city. Primary data are collected from a survey of 120 employees. The study uses the main analytical methods including exploratory factor analysis (EFA), confirmatory factor analysis (CFA) and PLS-SEM. Employees in the sample are mainly from 18 to 25 years old. Most of respondents have the education level of bachelor degree. There are 72.5% of the sample being office staff. The green behaviors implemented at the workplace are mostly putting garbage in the right place, maintaining general hygiene at work and turning off lights and fans when leaving the room....

The results of PLS-SEM analysis show that green training and awareness of green working environment have an influence on voluntary green behavior of employees. Besides, statistical evidence also shows that green training has a positive effect on the perception of green working environment and job satisfaction of employees. In addition, awareness of the green working environment is recognized as a mediator for the impact relationship between green training and voluntary green behavior. However, there is no statistical evidence on the mediating role of job

satisfaction on the relationship between green training and voluntary green behavior of employees

Green training and voluntary green behavior is a relatively new concept, but it is currently receiving the attention of organizations and businesses in Can Tho City in particular and in Vietnam in general. Academically, the research has introduced the model as well as estimate the effect of green training on voluntary green behavior with the mediating role of green working environment awareness and job satisfaction in the context of Can Tho City. Researchers can consider this as a reference model for further research. From the results of this research, managers of enterprises can realize the importance of green training to the voluntary green behavior of employees and thereby propose solutions to promote green training associated with the aim of raising employees' awareness of the environment and promoting sustainable behavior of employees.

Based on the results, some governance implications to promote voluntary green behavior of employees are proposed. Accordingly, business managers should regularly conduct green training programs related to environmental activities for employees. The green training helps to improve the knowledge, skill and attitude of employees on environmental issues, thus helping to equip employees with the necessary expertise for successful implementation of green development goals. Investing in green training can improve an organization's environmental sustainability and also support employees' working lives, which in turn can help employees improve job satisfaction. Moreover, businesses should also announce general policies at work and encourage employees to practice green behavior through reward and evaluation activities, thereby helping them to be aware of the organization's focus on green training and capacity development. In addition, this also help them better understand the sustainable green development policies of enterprises. Besides, businesses should also organize environmental action programs to raise and maintain employees' awareness of the green working environment. Green education activities could directly enhance the green working environment and develop the habitual green behavior of employees, thus creating environmental values that promote the sustainability and green ecology of the organization.

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