Effect of Economic and Environmental responsibility, Ethical responsibility, and Philanthropic responsibility on the Product brand image of Thailand's agricultural products

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Abstract

Even though consumer edible material specifically concerning agricultural food expenditures in the world is increasing by every year. These expenditures are going to ranchers and farmers however, this indicates that this increase is not increasing sufficient profit for ranchers and farmers especially in Thailand. In the world of today, many modern ways have the potential to increase ranchers' and formers' profit without pricey expansion, while indulging them to sustain their autonomy. According to the current study, a better agricultural product brand image has a significant effect on ranchers' and farmers' profits. Hence, the current study examined the role of corporate social responsibility and its determinants for a better agricultural product brand image. To achieve the outcomes of the current study a survey was conducted from 260 managers which were the population of the current study. After collecting primary data from the population of the current study, statistical software named Partial Least Square was used to obtain the final results of the current study. It was concluded that corporate social responsibility and its determinants have positive effects to achieve a better agricultural product brand image.

Keywords: Environmental responsibility, economic responsibility, ethical responsibility, philanthropic responsibility, and product brand image.

I. INTRODUCTION

The current research reports a study of the brand image of agricultural products produced in Thailand. Thailand is considered one of the major food exporters in the world (Wardani, Mulatsih, & Rindayati, 2018). Durian fruit, tapioca flour, sugar, chicken, and processed tuna are the top export, however, rice is the (Srisathidwattana, chief export 2018). Thailand's largest export markets are China, Indonesia, Cambodia, the Philippines, Japan, Vietnam, Myanmar, and Malaysia. Increasing consumer incomes in major importers of Thailand such as China, Malaysia, Japan, and Indonesia, play a significant role in Thailand's economy. Thailand's main import partners are European Union (8 percent) China (15 percent) and Japan (20 percent.

Thailand's agriculture industry has a significant contribution to the country's economy (Sampantamit et al., 2020). Rice export every year contributes a significant amount to Thailand's total economy. Fresh fruits are another major export of Thailand. Durian fruit and its products already have a meaningful contribution to the country's economy. After China, and the USA, Thailand is the largest

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exporter of fresh fruit in the world (JESDAPIPAT). Seafood and meat preparation is also one of the major exports of Thailand that contribute a significant frugality to the country's economy. The following Figure 1 shows Thailand's major export destination for 2018.

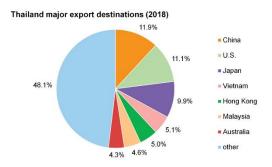


Figure 1: Thailand major export destinations (2018)

Source: https://cdn.britannica.com/48/187448-050-C81A89D7/World-Data-export-destinations-pie-chart-Thailand.jpg

For any business, brand image plays a significant role. Consumers while buying products not only spend money to buy a product but also pay for what a brand stands for (Panda et al., 2020). Hence, it is quite necessary to design a brand image aiming to convey the exact message, meaning, and importance of a brand. According to the current Thailand's study. agricultural products normally don't focus on or emphasize the brand image. There are several factors involved in a process of a brand image. However, according to the current study corporate responsibility and its determinants have a significant effect on brand image specifically for agricultural products of Thailand.

There are several studies available describing the role of corporate social responsibilities. It is also observed that studies are available investigating the role of corporate social responsibilities in various domains such as education, sports, and finance. Many studies exploring the role of corporate social responsibilities for agricultural products are also available (Anser, Zhang, & Kanwal, 2018; Chen, Wang, & Li, 2022). However, it is determined that there is no study available

exploring the role of corporate social responsibilities to the brand image of agricultural products in Thailand. Hence, the current study is a unique study exploring corporate social responsibilities and their determinants such as community charity, diversity, human rights, product safety, product quality, employee relations, and corporate governance to design brand image for Thailand's agricultural products.

Like other studies, the current study also has specific purposes to obtain its results. One of the core objectives of the current study is also to evaluate the factors affecting product brand image. Hence, the current study was purposed to determine the role of corporate social responsibility and its determinants agriculture product brand image specifically in Thailand. In the current study effect of environmental responsibility, economic responsibility, responsibility, ethical philanthropic responsibility on agriculture product brand image were investigated.

The current study also has both theoretical as well as practical implications. Theoretically, the current study describes the relationship between product brand image and corporate social responsibility and its determinants. It is described that variables of the current study. environmental responsibility, economic ethical responsibility, responsibility, philanthropic responsibility have a direct relationship with product brand image. Moreover, practically the current study is a unique contribution for the managers and administrative authorities working in the agriculture sector aiming to increase the value of their agricultural product brand image.

2. Literature Review

The role of social corporate responsibility is significant for a company aiming to transform into brand equity (Hafez, 2018; Ma & Kaplanidou, 2021; Mahmood & Bashir, 2020). Therefore, there is a strong relationship between corporate social responsibility and brand equity. Moreover, actions and activities of corporate social responsibility increase the

image and reputation of a company. According to a previous study, communication, and marketing, departments are usually accountable managing brand for the (Tworzydło, Gawroński, & Szuba, 2021). Hence, they use their resources and skills which are necessary Oh yeah Richard necessary which are necessary to reach out to the groups and communities concerning. to reach out to all the various stakeholders this team usually utilizes skills and resources to ensure that the brand is effectively communicated. It is obvious that corporate social responsibility Comes into action with its following four types: Environmental responsibility, ethical economic responsibility. responsibility, philanthropic responsibility.

The role of corporate social responsibility is significant particularly when it comes to the level of satisfaction and retention of employees of an organization. corporate social

responsibility is also considered as a great for brand identity because it helps to boost public respect and customer trust for the brand. No doubt corporate social responsibility itself produces positive effects (May, Hao, & Carter, 2021). Because usually every company and sustainable business practices new committed to ethical employee treatment and fair pay more positivity is brought into the world. it is believed that profit made by an organization and a successful business done by the organization are two different things and a successful business goes beyond profit. While the role of product brand image is significant to make a business successful. The current study is aimed to investigate the role of corporate social responsibility and its determinant on agricultural product brand image in Thailand. Hence, Figure 2 describes the relationship between corporate social responsibility and its determinant and agricultural product brand image.

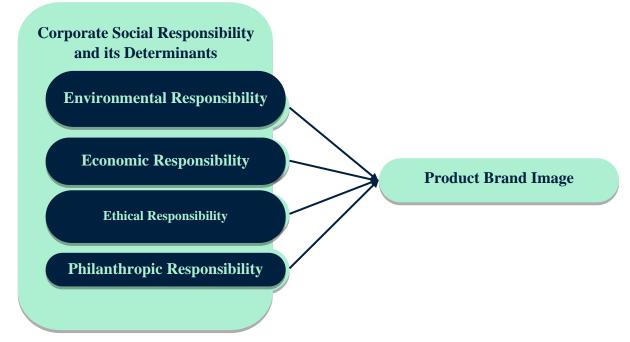


Figure 2: Theoretical framework of the study shows the relationship between environmental responsibility, economic responsibility, ethical responsibility philanthropic responsibility, and product brand image.

2.1 Environmental Responsibility and Product Brand Image

To keep the environment safe, every business has to perform its role (Ingsih, Wuryani, & Suhana, 2021). Keeping the environment safe is a moral ethic while a pure and pleasant

environment is a basic need for humans and other livings. Therefore, it is a corporate social responsibility to save and protect the environment. Organizations while producing their products, emit various harmful materials such as waste materials, gasses, and other extravagances. Products ready for consumers add value to consumers' health, social and personal lifestyles (Ingsih et al., 2021; Kerdpitak, 2022b). However, on the other hand in factories, where these products are produced from raw materials also result in poor health, social and personal lifestyles of the people. Because during the production process of products various kind of injurious gasses combines with fresh air to pollute it, various harmful waste material mixed with water in the rivers and canals linked with the factories cause for water pollution or garbage material sent outside of the factory area cause for soil pollution. According to a previous study, the perception of an organization that doesn't have environmentally friendly production units is not acceptable by the societies. Because climate adversity is common due to the production units in factories. In Thailand, it is a more critical situation specifically for the production of agricultural products such as pesticides, urea, and other materials used for crop production and to preserve them. Various kinds of harmful chemicals and materials are used for seed protection which is harmful to the environment (Singh, Bhuker, & Jeevanadam, 2021). However, there are methods to use these chemicals which spare fewer or no side effects of these chemicals to the environment. According to the current study environmental responsibility is one of the major factors that has a significant influence on an organization's public image. It is determined organizations keeping more protection and measures while producing agricultural products in Thailand have a good perception and public image. On the other hand, the organizations that do not take an interest to make the environment clean and protecting it, often remain to fail to attain effective public attention with their products. Due to this negligence of the organizations, other organizations also struggle to maintain their public image and brand image. Hence, it is a corporate social responsibility of the organizations to take steps that are useful and effective for making the environment more friendly. Results of the current study describe that taking environmental responsibility helps organizations to enhance their agricultural

product brand image. Hence, it is hypothesized that.

H1: Environmental responsibility has positive effects on product brand image.

2.2 Economic Responsibility and Product Brand Image

Economic responsibility refers to the impact on society, people, and the environment (Yoon, Jeong, & Chon, 2021). Hence, economic responsibility is usually practiced organizations aiming to support all of their decisions which financial shows organizations' commitment to doing good in the environment. In other words, economic responsibility is a standard set of moral and ethical regulations. According to a previous study, in economic responsibility, decisions are made by considering their general comprehensive impacts on businesses society at the same time. Hence, economic responsibility enables to improve environmental operations which are necessary particularly that help to engage in sustainable business practices (Caputo et al. 2021; Kerdpitak, 2022). For organizations to maintain their products quality and price it is also important to understand their consumers' needs. With knowing consumers' demands and needs organizations can earn more profits. Hence, understanding consumers' perspectives and meeting their demands and needs is the economic responsibility of an organization. Moreover, economic responsibility is important for businesses because it gives a sense of purpose that helps businesses to build resilience amidst adversity on a societal level. Economic responsibility helps organizations to build strong partnerships with the community and consumers. Hence, according to the current study agricultural organizations in Thailand support nonprofits through materialistic donations, making monetary or volunteerism strong partnership with enjoys a community and consumers. It is the organizations being determined that successful to make headlines of their economic responsibilities through media coverage, social media, or print media, make circumstances becoming more favorable and beneficial in the

eyes of their customers. Many CEOs of organizations can't deny economic responsibility and they believe that economic responsibility has become a necessary practice (Talonen, Jussila, Tuominen, & Ruuskanen, 2021). Each step by an organization towards productivity requires more responsibility to make its relationship healthy with its coworkers, employees, and consumers. Therefore, economic responsibility has a significant effect and helps to raise the confidence, pride, and self-esteem of a business. Besides gaining respect from the general public, practicing economic responsibility improves the brand image of an organization. Results of the current study show that the agricultural organizations in Thailand that don't believe in economic responsibility and have no definite system for it normally remains fails to achieve a brand image. While on the other hand, the agricultural organizations that have a strong system and practice regularly for economic responsibility comparatively enjoy a popular brand imaging. Hence, it is deducted that decreased value of economic responsibility decreases product brand image while an increased value of economic responsibility increases the product brand image. Hence, it is hypothesized that.

H2: Economic responsibility has positive effects on product brand image.

2.3 Ethical Responsibility and Product Brand Image

The ability to act upon, interpret and recognize multiple values and principles as per the code of conduct within a given context or field is called ethical responsibility (Holmes et al., 2021). In business, ethical responsibility refers to the business owner's responsibility to show his/her truthfulness in all transactions. Giving a fair price to consumers and suppliers for materials is an example of the ethical responsibility of a business owner. Initially, a business owner needs to study actual costs and then decide a price to charge the retailer or distributor (Cheung & To, 2021). According to previous study, maintaining ethical responsibility provides the protected environment and integrity of society within a company (Mattar, 2021). It is concluded that normally ethical implications of an action taken by a company, neglect personal achievement, and advantages are given to others. However, practicing ethical responsibility allows a business to promote its public perception. As per the current study, it is observed that more organizations normally fail to show ethical responsibility. However, the agricultural product producing organizations in Thailand that obey government policies, follow rules and regulations and take responsibility to make the environment neat and clean, enjoy a good public perception hence, they have a good product brand image. These organizations are good practice of professionalism. accountability, effective communication, mutual respect, and trust among their internal systems as well as between the various groups of their competitors which ultimately result in an effective product brand image. Operating in an ethical and fair manner makes an organization more popular and helps to make its unique identification (Rahaman et al., 2022; Kerdpitak, 2022a). With unique identification, it becomes quite easy for an organization to register itself as a product brand image among the general public. The ethical responsibility of an organization includes all stakeholders including investors, suppliers, leadership, employees, and customers; aiming to achieve fair treatment. However, there are various methods to embrace ethical responsibility for an organization. Concerning this, most organizations ensure that they are not buying products resulting from child or slavery labor. Research conducted by Frunză (2011) describes that organizations are responsible to practice ethical responsibility as they are equally responsible in the global system. Results of the current study show that the organizations with consistent practice of ethical responsibility, normally have a good product brand image, while the organizations especially regarding agricultural product production in Thailand, remain to fail to win recognizable perception in public hence, they don't have a good product brand image. That is why it is hypothesized that.

H3: Ethical responsibility has positive effects on product brand image.

2.4 Philanthropic Responsibility and Product Brand Image

Philanthropic responsibility means a business's goal to ardently convert the society and world a better place (Nguyen, Mai, & Nguyen, 2021). In other words, philanthropic responsibility refers to acting environmentally and ethically friendly as much as possible. Hence. organizations having philanthropic responsibility allocate a definite portion of their profit. By doing so organization wins the hearts of common people that helps them to make a positively effective public image. According to a past study, philanthropic responsibility increases the sufficient value of productivity and employee engagement. According to a report, 78% of employees desire to engage with CSR initiatives. By increasing the value of philanthropic responsibility, it becomes easy for organizations to increase their reputation. It is observed that the agricultural organizations in Thailand that allocate a sufficient portion of their earnings for philanthropic responsibilities, win top talent to be an influential part of their business which adds significance positive meaning to the public image as well as overall business performance. Hence, the increased value of philanthropic responsibility improves brand awareness to make product brand image more popular in public. Hence, it is hypothesized that.

H4: Philanthropic responsibility has positive effects on product brand image.

3. Research Methodology

To accomplish the required results of a research study, the significance of the research method cannot be ignored, because it plays a crucial role in the process. Hence, an appropriate selection of research methods is necessary. Usually, in research, three common research approaches are widely used by the researchers. These research approaches are named as qualitative approach, quantitative approach, and mixed-method approach. However, in the selection of a research approach nature of the study under examination, play an important role. As the nature of the current study is

quantitative, hence, a quantitative research approach was selected to get the results.

Including the quantitative research method, the current study used a questionnaire survey to collect primary data. Hence, a questionnaire survey was adopted in the current study. The population of the current study is based on the agricultural sector of Thailand. Therefore, managers working with various agricultural organizations in Thailand were selected as the respondents of the current study. Hence, the copies of the questionnaire were distributed among these managers. For this purpose, area cluster sampling was adopted because area cluster sampling is one of the best techniques to be used specially when the area under consideration is very wide. As the population of the current study belongs to various parts of Thailand, hence, the whole country is under consideration, which is a wide area, and the area cluster sampling technique is the best selection.

Furthermore, a 500-sample size was preferred, this sample size was selected based on the recommendations of Zhang, Novaes, Kirst, and Peter (2014). According to them "sample having less than 50 participants will observe to be a weaker sample; sample of 100 size will be weak; 200 will be adequate; sample of 300 will be considered as good; 500 very good whereas 1000 will be excellent." Hence, the current study used 500-sample size which is very good. Copies of the questionnaire among the respondents were distributed by using the WhatsApp service. Initially, WhatsApp numbers of all the respondents were collected from the head office of their concerning agricultural organization. It was ensured that this contact information basic of respondents will never be shared with anyone else. Moreover, all the respondents were also ensured that data collected from them will remain confidential and will only be used for the purposes of the current study. Hence, the questionnaire along with a brief description of the purposes of the current study was sent to every respondent individually. After 2 weeks of the questionnaire sent to the respondents, there were 110 responses received from the respondents. Hence a reminder WhatsApp call

was made with the rest of the respondents. After 1 more week, after the reminder call, there were 140 more responses received. Now there were 260 responses received in total. However, 20 responses out of 260, were excluded because these 20 responses were partially filled by the respondents. Hence, rest 240 responses were considered as primary data of the current study.

Moreover, the current study used a 5-Point Liker scale ranging from "1" as "Strongly Agree" to "7" as "Strongly Disagree" for responsibility, environmental economic responsibility, ethical responsibility, philanthropic responsibility, and product brand image measures. The questionnaire was divided into two major sections. In the first section of questionnaire, the respondents were requested to give information of demography regarding age, education, job experience, along with other basic background information about the respondents. While the second section of the questionnaire was based on the research questions related to the key variables namely environmental responsibility, economic responsibility, ethical responsibility, philanthropic responsibility, and product brand image. All the measures were selected and adapted from previous studies.

4. Data Analysis

This preferred study to examine the relationship between variables through Partial Least Square-Structural Equation Modeling (PLS-SEM). PLS-SEM is based on two major steps, 1) measurement model assessment and 2) structural model assessment (Hair et al., 2019). However, before applying PLS-SEM, this study carried out data screening. During the data screening process, all the errors such as missing values, outliers, and normality of the data were examined.

4.1 Measurement Model Assessment

PLS measurement model is based on reliability and validity which is given in Figure 3. To examine the reliability and validity, confirmatory factor analysis (CFA) is carried out. To retain the scale items, this study proposed 0.5 as the minimum level. Factor loadings are presented in Table 1. It is evident that all the scale items have factor loadings above 0.5. Therefore, these scale items are retained.

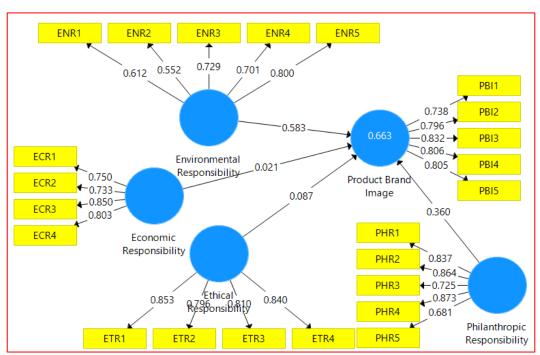


Figure 3. Measurement Model Assessment

Variables	Items	Loadings	Alpha	CR	AVE
Economic Responsibility	ECR1	0.75	0.794	0.865	0.617
	ECR2	0.733			
	ECR3	0.85			
	ECR4	0.803			
Environmental Responsibility	ENR1	0.612	0.726	0.812	0.502
	ENR2	0.552			
	ENR3	0.729			
	ENR4	0.701			
	ENR5	0.8			
Ethical Responsibility	ETR1	0.853	0.843	0.895	0.681
	ETR2	0.796			
	ETR3	0.81			
	ETR4	0.84			
Philanthropic Responsibility	PBI1	0.738	0.859	0.898	0.64
	PBI2	0.796			
	PBI3	0.832			
	PBI4	0.806			
	PBI5	0.805			
Product Brand Image	PHR1	0.837	0.855	0.896	0.633
	PHR2	0.864			
	PHR3	0.725			
	PHR4	0.873			
	PHR5	0.681			

Table 1. Reliability and Convergent Validity

The assessment of composite reliability (CR) and average variance extracted (AVE) is needed to achieve convergent validity. Table 1 shows the CR and AVE values. Results of the measurement model show that all the constructs; environmental responsibility, economic responsibility, ethical responsibility, philanthropic responsibility, and product brand

image have CR above 0.7 and AVE above 0.5 which confirmed the convergent validity. Along with convergent validity, discriminant validity is achieved by using a heterotraitmonotrait ratio of correlations (HTMT)0.9. It is given in Table 2 which shows that all the values are below 0.9.

Table 2. Discriminant Validity

	Economic Responsibility	Environmental Responsibility	Ethical Responsibility	Philanthropic Responsibility	Product Brand Image
Economic Responsibili	ty				
Environmental					
Responsibility	0.522				
Ethical					
Responsibility	0.615	0.784			
Philanthropic					
Responsibility	0.775	0.808	0.815		
Product Brand Image	0.822	0.618	0.745	0.798	

4.1 Structural Model Assessment

Structural model assessment is used to test the hypotheses based on the relationship between environmental responsibility, economic

responsibility, ethical responsibility, philanthropic responsibility, and product brand image. PLS bootstrapping in Figure 4 is used to test the study hypotheses (Hair, Hult, Ringle,

Sarstedt, & Thiele, 2017; Hair et al., 2019; Khan et al., 2019). T-value 1.96 and beta value is used to test the hypotheses. Results of the study shown in Table 3 proved that environmental responsibility, economic

responsibility, ethical responsibility, and philanthropic responsibility have a positive effect on product brand image as the t-value is above 1.96 with a positive beta value. Thus, all the hypotheses are supported.

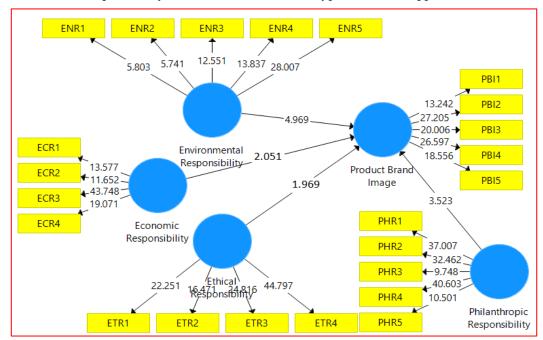


Figure 4. Structural Model Assessment

Table 3. Results

		Sample	Standard		
	Original	Mean	Deviation	T Statistics	P
	Sample (O)	(M)	(STDEV)	(O/STDEV)	Values
Economic Responsibility -> Product Brand					<u>.</u>
Image	0.021	0.024	0.01	2.051	0.04
Environmental Responsibility -> Product					
Brand Image	0.583	0.582	0.117	4.969	0
Ethical Responsibility -> Product Brand					
Image	0.087	0.063	0.044	1.969	0.05
Philanthropic Responsibility -> Product					
Brand Image	0.36	0.341	0.102	3.523	0

Finally, this study examined predictive relevance (Q2) to ensure the quality of the model. According to the literature, predictive relevance (Q2) must be higher than zero to achieve a minimum quality level. It is given in Table 4 which shows that predictive relevance

(Q2) is 0.407 for product brand image. The r-square value is 0.663 which shows that; environmental responsibility, economic responsibility, ethical responsibility, and philanthropic responsibility are expected to bring 66.3% change in product brand image.

Table 4. Predictive Relevance (Q2)

	SSO	SSE	Q ² (=1-SSE/SSO)
Economic Responsibility	644	644	
Environmental Responsibility	805	805	
Ethical Responsibility	644	644	
Philanthropic Responsibility	805	805	
Product Brand Image	805	477.432	0.407

5. Discussion and Conclusion

The first hypothesis of the current study describes that: environmental responsibility has positive effects on product brand image. A past study conducted in a university in China by graduate students in the Department of Agricultural Science shows that various kinds of harmful waste materials in liquid shape penetrate with the water outside the production area to make the water polluted during the production process of agricultural products (Liang, Wang, Gong, & Li, 2021). Research conducted by Yang, Wong, and Miao (2021) shows that there are very few numbers of organizations that have complete knowledge of environmental responsibility. Another research published in the Journal of Cleaner Production also shows that organizations with more knowledge of environmental responsibility are more popular among their audience and comparatively easy to maintain their product brand image (Gunarathne & Lee, 2021). To sustain our environment for next generations it is an urgent and basic responsibility to take environmental responsibility very vigorously within all kinds of businesses. To meet these requirements, government, local bodies, and other corporate social responsibility units must play their role. Moreover, there is also a need for a strong bond and determination among various businesses and organizations aiming to environmental responsibilities take seriously.

The second hypothesis of the current study describes that: economic responsibility has positive effects on product brand image. According to a past study on the Malaysian hotel industry conducted by Mohammed and Rashid (2018) describes that economic responsibility influences brand image and customers' satisfaction. Economic responsibility is being more popular among economic and industrial experts as they recognize it as a beneficial way to develop long-term relationships with customers (Ibrahim, Howard, & Angelidis, 2003). Another past study describes that practicing economic responsibility helps an organization to reduce its financial risks and raise total stock. Evidence from past studies shows that the regular practice of economic responsibility of an organization has significant effects on the behavior and attitudes of customers Dabija, Gazzola, Cegarro-(Vătămănescu, Navarro, & Buzzi, 2021). It is determined that economic responsibility enables a business to create more consumer-centric programs which are more relevant and more eye-catching to consumers, and it ultimately helps to improve product brand image. Results of a previous study revealed that being more economically responsible for an organization make it more popular and famous that helps it make sustainable business (Ali & Kaur, 2021). regular Hence. practice of economic responsibility increases customers' purchase intentions that ultimately help to grow product brand image.

According to the third hypothesis of the current study: ethical responsibility has positive effects on product brand image. A prior study shows that the concept of ethical responsibility has been embedded across the physical and psychological boundaries of a firm building upon honesty, confidence, and fairness that helps it to promote its brand image. Research in the Islamic Republic of Iran, conducted by Salehzadeh, Pool, and Najafabadi (2018) describes that ethical responsibility has a significant positive effect on brand image. Many scholars purposed ethical that responsibility has multidimensional positive effects. Ethical responsibility means that organizations should be honest, and abide by various state, federal, and local regulations and more importantly, they are responsible to provide services and goods to fulfill legal obligations (Pratihari & Uzma, 2018). Ethical responsibility requires that organizations necessarily perform what is expected morally or ethically and respect and acknowledge underdevelopment ethical norms and it is valuable to acknowledge that corporate ethical integrity and behavior go beyond laws and regulations (Štreimikienė & Ahmed, 2021).

According to MEHARI (2021) describes that in a national alcohol and liquor factory, corporate social responsibility such as philanthropic responsibility has an impact on brand image. A study based on the Iranian insurance sector

conducted by Soleimani, Ebrahimi, and Fekete-Farkas (2021) determined that the nexus between philanthropic responsibility and product brand image is positively significant. Hence, it is also obvious from the past literature that philanthropic responsibility has a significant positive influence on product brand image.

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