

Predictors of Pro-environmental Behavior of Traditional Market Traders in West Sumatra, Indonesia

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Abstract

Background: Environmental sanitation in the market is important because that is where buying and selling takes place and often takes the form of direct consumption of goods and services. The market environment, especially in developing countries, is polluted due to social error, improper disposal of domestic wastewater, poor sewage disposal, open defecation and unhygienic sanitation practices.

Aims: This study aims to assess predictors of pro-environmental behavior of traditional market traders in West Sumatra, Indonesia.

Materials and Method: The theory of planned behaviour becomes a reference in this research. The population of the study were traders in Nanggalo Market, Padang City and Ibu Market, Payakumbuh City. The dependent variable is the pro-environmental behavior of market traders and the independent variable consists of attitude, subjective norm, and perceived behavior control.

Conclusions: Subjective norms and perceived behavioral control are predictors of pro-environmental behavior of traditional market traders.

Keywords: *Pro-environmental behavior, tradional market, trader.*

Introduction

The idea of reducing the environmental and human health consequences arising from poor sanitation practices has been enacted by past and present government administrations.^[1] One of them is pro-environmental behavior. Environmental sanitation in markets is important because that is where buying and selling takes place and often takes the form of direct consumption of goods and services.^[2] The market environment, especially in developing countries, is polluted due to social error, improper disposal of domestic wastewater, poor waste disposal, open defecation and unhygienic sanitation practices.^[1] Majority of the market traders do not participate in environmental sanitation programme.^[3] Pro-environmental behavior refers to the involvement of citizens in the provision, use and maintenance of environmental sanitation facilities and services and compliance with environmental laws. In order to achieve the right environmental sanitation conditions in the market, good pro-environmental behavior and the availability of facilities and services must work simultaneously.

The Indonesian government established two retail classifications (markets), namely traditional markets and modern markets.^[3] Traditional markets are places where sellers and buyers meet and are characterized by direct seller transactions. There is usually a bargaining process. Buildings usually consist of stalls or outlets, booths, and open bases that are opened by sellers or a market manager. Most sell daily necessities such as food ingredients in the form of fish, fruit, vegetables, eggs, meat, cloth, electronic clothing, services, and others. In the city of Padang, including traditional markets, such as; Pasar Raya, Alai Market, and Nanggalo Market. While in the city of Payakumbuh, one of the traditional markets is included in the category of healthy markets, namely the Ibu market.

Modern markets are not much different from traditional markets, but this type of market sellers and buyers do not transact directly. Still buyers see the price tags listed in the goods (barcodes), are in buildings, and services are carried out independently (self-service) or served by salespeople.^[4] Items sold, other than food ingredients such as; fruit, vegetables, meat; most of

the other items sold are items that can last a long time. Examples of modern markets in the city of Padang are Plaza Andalas, Basko Grand Mall, and Transmart.

Traditional markets in Indonesia are often uncomfortable visiting because they are identical to dirty places, smelly, muddy, stuffy. It also becomes a breeding ground for infectious animals, such as cockroaches, flies, and mice. Information from various health authorities noted that there were more than 250 types of diseases transmitted through unsafe food. An unhealthy market positively impacts the sale of unsafe food. Data from 2005 shows that 60% of Indonesians obtain food and other daily necessities from traditional markets.^[5]

This study aims to assess predictors of pro-environmental behavior of traditional market traders. Furthermore, this study also tries to answer whether there are differences in predictors of pro-environmental behavior between markets that are categorized as healthy markets and those that are not.

Materials and Method

The markets studied were Nanggalo Market in Padang City and Ibh Market in Payakumbuh City, West Sumatra, Indonesia. The Nanggalo market represents a traditional market that has not been categorized as a healthy market, while the Ibh market is a traditional market that has received an award as a healthy market. 48 traders were taken as respondents from each market.

Systematic sampling method are used in selecting sample traders in both markets. For the administration of the questionnaire, 2% of traders in each part of the trader category were selected for the survey. Thus, a total of 96 respondents were chosen. This consists of 48 traders from the Nanggalo market and 48 from the Ibh market

Theory of planned behavior becomes a reference in this research. The dependent variable is the pro-environmental behavior intention of market traders and the independent variable consists of their belief in the concept of pro-environmental behavior (attitude), the influence of the people they think influences them in implementing the behavior (subjective norm), and how easy or difficult it is to behave. pro the environment in which they reside (perceived behavior control).

Results

A total of 96 respondents participated in this study with an equal number in both markets. Female respondents were 65 people, more than 2 times that of male respondents (31 people).

Pro-environmental Intention Behavior: This study examines the intention to apply pro-environmental behavior to traditional market traders. It can be concluded that traders are eager to support the program of utilizing waste as an energy source (91.7%), processing waste into useful and salable materials (60.4%), reusing waste that can still be used (62, 5%), and reduce the use of materials that have the potential to become waste (43.8%).

Knowledge: Most of the traders (87.5%) strongly agree with the statement that environmental behavior can be applied by recycling waste into useful and salable goods. Meanwhile, 79.2% of traders strongly agree with the statement that environmental behavior can be carried out by avoiding using materials that have the potential to become waste, reusing waste that can still be used, and by making waste as an energy source.

Attitude toward Pro-environmental Behavior: This research finding reveals how the attitudes of traders towards pro-environmental behavior. Traders strongly agree that pro-environmental waste management will reduce environmental pollution (93.8%) followed by implementing pro-environmental waste management will make the market environment clean and beautiful (92.7%), and pro-environmental waste management will make waste useful for daily life (85.4%).

Subjective Norm: The head of the market is considered as the most likely person to influence traders' decisions to adopt or not adopt pro-environmental behavior in the market (53.1%), followed by market security officers (51.0%), and public figures (31.3%).

Perceived Behavioral Control: The factors that are considered very likely to be difficult to implement pro-environmental behavior according to market traders are the absence of specific learning about pro-environmental behavior (54.2%), followed by a lack of availability of trash cans in every corner of the market (46.9%), and trash cans there is dirty and smelly (45.8%).

Predictors of Pro-Environmental Behavior:**Table. Multiple Regression Analysis**

Predictor	Beta	T	Sig. t
Knowledge	0.041	0.415	0.679
Attitude	0.052	0.532	0.596
Subjective Norm	0.210	2.188	0.031
PBC	0.323	3.273	0.002

The results of the regression analysis show that of the four predictors, subjective norms and perceived behavior control are significant and positive in relation to the intention of pro-environmental behavior. Perceived behavior control was the strongest predictor of intention to adopt pro-environmental behavior compared to knowledge, attitudes, and subjective norms with a beta estimate of 0.323. Subjective norms were also statistically significant predictors of pro-environmental intention behavior.

Discussion

Based on this research finding, knowledge and attitudes towards pro-environmental behavior have no effect on the traders intention to apply or not to implement pro-environmental behavior. This result is not similar to Gusti A, et al^[8] who stated knowledge and attitudes has a significant relationship with the sustainable waste management intention behavior. Traders are more practical in thinking and behaving where they behave as other people behave and there is an ease to carry out this behavior.

This result similar to Niaura A^[7] and Gusti^[9] that correlations between perceived behavior control and the behavioral intentions were found the highest. But not in line with Kumar^[9] who state that the strength of significant relationship between attitude and purchase intention is greater compared to the significant relationship between perceived behavioural control and purchase intention

So in general, the intention to apply pro-environmental behavior depends more on social factors, the surrounding environment (subjective norm) and the factors that are easy or difficult according to traders' perceptions to implement pro-environmental behavior in the market. However, majority of the traders do not agree that government provide sanitary facilities and equipment available in the market.^[7]

Conclusion

This study assesses predictors of pro-environmental behavior of traders in Ibh traditional markets in Payakumbuh City and Nanggalo in Padang City. This study determined that subjective norms and perceived behavioral control are predictors of pro-environmental behavior of traders. Traders will adopt pro environmental behavior depending on the people they think they care about. Traders' perceptions of complicating and facilitating factors also influence their intention to adopt or not implement pro-environmental behavior in the market.

These findings can be used as a basis for the city government to improve the pro-environmental behavior of market traders which in turn will improve the sanitation of the market environment.

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