



Health Promotion in Clean and Healthy Behavior Programs in Traditional Markets



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Article history:

Received: 20 February 2018

Revised: 25 June 2018

Approved: 1 July 2018

Published: 7 July 2018

Keywords:

Attitude;

Intention;

Subjective Norms;

Clean and Healthy Behavior;

Abstract

Health Promotion in Clean and Healthy behavior program is a behavior that can be affected by attitudes, subjective norms, intentions and behaviors. The purpose of this study is to application attitude, subjective norms, intentions, and behavior clean and healthy by using Theory of Reasoned Action. This research type was an analytical observational study with cross-sectional. Research location was in Imogiri traditional market in Bantul Yogyakarta Indonesia. The sampling technique was accidental sampling. Data collection techniques were questionnaire and observation sheet. Data analysis used Amos 24. Attitudes affected the intention; Attitude effect on Behavioral Beliefs; Subjective norms affect Outcome Evaluations; The intention affected the intention of disposing of; The intention affected the intention of utilizing latrines; The intention affected the intention of not smoking in the market; intention affected the intention to wash hands with soap; Clean and healthy life behavior has an effect on non-smoking behavior in the market; Clean and healthy life behavior has an effect on hand washing behavior with soap.

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1. Introduction

Indonesia is still burdened with environmentally transmitted diseases such as Dengue Hemorrhagic Fever (DHF), Pulmonary Tuberculosis, malaria, Diarrhea, Acute Respiratory Infections, HIV/AIDS, Filariasis, Worms, Skin Diseases, Poisoning, and Complaints due to the poor working environment. Based on the Basic Health Research (Riskesdas) in 2013, the number of cases of ARI pneumonia trended to increase for the prevalence period of pneumonia

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of all ages from 2.1% (2007) to 2.7% (2013). The prevalence of pulmonary TB was still in the same position for 2007 and 2013 at 0.4%. There was an increase in the prevalence of hepatitis in all age groups from 0.6% (2007) to 1.2% (2013). There was a decrease in the prevalence rate of Diarrhea from 9.0% in 2007 to 3.5% in 2013 ([Ministry of Health RI, 2013](#)).

Various environmental components such as food, insects, water, air and humans themselves (known as transmission through direct contact) are health risk factors. A bad environment is a risk factor for the incidence of disease. Population factors such as age, gender, education level are the risk of disease incidence. Thus, population and environment are risk factors for disease incidence ([Achmadi, U.F, 2005](#)).

The traditional market is one of the public places that are at risk of disease caused by the bad environment. Traditional markets according to [the Ministry of Health RI \(2008\)](#) are permanently located markets, there are managers, most of the goods traded are basic daily necessities with simple trading practices and infrastructure facilities and there is direct interaction between sellers and buyers. Markets also have a very important position to provide safe food, and markets are influenced by the presence of producers, providers of fresh ingredients (upstream), suppliers, sellers, consumers, market managers, health-related officers and community leaders ([Ministry of Health RI, 2008](#)).

The behavior of market traders is often assumed as the main cause of the occurrence of conditions in most traditional markets that has a bad stigma. In contrast, in the market, it can be found that the role of market managers, especially from the government apparatus, in trying to improve the behavior of traditional market traders is still very limited. There are many of the underlying causes of this condition. It includes the limited number of personnel and the ability (competence) of individual management personnel ([Ministry of Health RI, 2011](#)).

Market Clean and Healthy Behavior (PHBS) is an effort to empower traders, workers, customers and market managers to know, will and be able to practice PHBS and play an active role in realizing healthy market ([Ministry of Health RI, 2008](#)). PHBS goal in the market is to improve community's PHBS in the market. PHBS indicators in public places, according to the Regulation of Minister of Health Number: 2269/MENKES/PER/ XI/2011 concerning Guidance of Clean and Healthy Life Behavior Guidance, cover 6 indicators. They are washing hands with soap, using the healthy latrine, dumping garbage in waste bins, do not smoke and drugs, do not spit in any place, and eradicating mosquito larvae Montano ([DE & Kasprzyk, D, 2008](#)).

Imogiri Market in Bantul is a traditional market selected by Bantul District Health Office in 2015 to realize the Healthy Market program. This program is implemented through the empowerment of market traders such as PHBS, waste management, food safety for food handlers and food sold. The training activities carried out include market management, environmental health, PHBS, and identification of health problems in the market environment such as the behavior of food handlers. All healthy market program activities are in cooperation with APPSI in Imogiri Market with the facilitators of the Provincial Health Office.

Based on the results of PHBS data collection of public places (TTU) from Bantul District Health Office in the working area of Puskesmas Imogiri I in 2015, there were several achievements. The achievements of PHBS in TTU in 2015 were 110 TTU (100%) that use clean water; 81 TTU (74%) that use healthy latrine; 110 TTU (100%) that dispose garbage in the waste bins; 67 TTU (61%) that have no smoking activity; 110 TTU (100%) that no spitting in any place; 110 TTU (100%) that eradicate mosquito larvae. Based on the monitoring result of 110 public places in the working area of Puskesmas Imogiri I, the conclusion is a percentage of PHBS TTU was 54.55% while the other 45.45% TTU did not implement PHBS.

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Behavioral change is facilities by a personal sense of control. If people believe that they can act to solve a problem instrumentally, they become more inclined to do so and feel more committed to this decision. While outcome expectancies refer to the perception of the possible consequences of one's action, perceived self-efficacy pertains to personal action control or agency ([Ministry of Health RI, 2013](#)).

The TRA, which focus on theoretical constructs concerned with individual motivational factors s determinants of the likelihood of performing a specific behavior TRA assume the best predictor of a behavior is the behavioral intention, which in turn is determined by the attitude toward the behavior and social normative perceptions regarding

it (Ministry of Health RI, 2011). The Clean and Healthy Lifestyle Program is a behavior that can be affected by attitudes, subjective norms, intentions and behaviors.

Based on the description, the problem formulation of this research was what is the determinant of the market community's clean and healthy life behavior by using Theory of Reason Action? The purpose of this study is to analyze the determinant of the market community's clean and healthy behavior that include attitudes toward behavior, subjective norms, and intention.

2. Research Methods

This research was quantitative research with descriptive observational analytic research design and using a cross-sectional approach. This research was conducted in Imogiri Market Bantul Yogyakarta Indonesia. The population of this study was the entire market community including the market traders, the managers, the market's APPSI administrators, and market customers. A sampling of the market community was taken intentionally which could be found and in accordance with the required sample requirements (Accidental sampling). The sample size is 165. Existing statistical tests will be very effective if applied to samples 30 to 60 or 120 to 250 and one of the conditions using structural equation modeling (SEM) models should be 100-400 samples (Champion, DJ, 1981).

Collecting data was by distributing questionnaires to the market community about the variables in the Theory of Planned Behavior that our attitudes toward PHBS, Subjective Norms, and Clean and Healthy Behavior. Data obtained through questionnaires were scored and processed by Amos 24 program Structural Equation Model (SEM), is a multivariate statistical analysis technique that analyzes structured relationships. This technique is a combination of factor analysis and multiple regression analysis (Hair, J.F, et al, 2010).

3. Results and Analysis

3.1 Characteristics of traditional market communities

Research result based on the gender, 93 people (56.36%) were female. Based on the age, 90 people (54.54%) were between 39-56 years. Based on the last education, 84 people (50.91%) were middle (SMA). Based the job in the market, 78 people (47.27%) were as the trader of Imogiri Market in Bantul. Based on the duration in the market, 132 people (80%) spent 5-8 hours.

3.2 Analysis research

The research early model result showed that: Attitudes affected the intention of clean and healthy behavior (C, R = 4,962; p = 0,000), but has no effect on Behavioral beliefs. Attitude effect on Outcome Evaluations (C, R = 31,314 p = 0,000). The results of this study are in line with the opinion of Ajzen who said the attitude as the first cause of intention to behave and become a major factor in adopting behavior [8], but contrary to Ajzen, 2005 that individual beliefs include two things: belief in the outcome of a behavior and evaluation of the outcome (beliefs strength and outcome evaluation) (Ajzen, I, 2005).

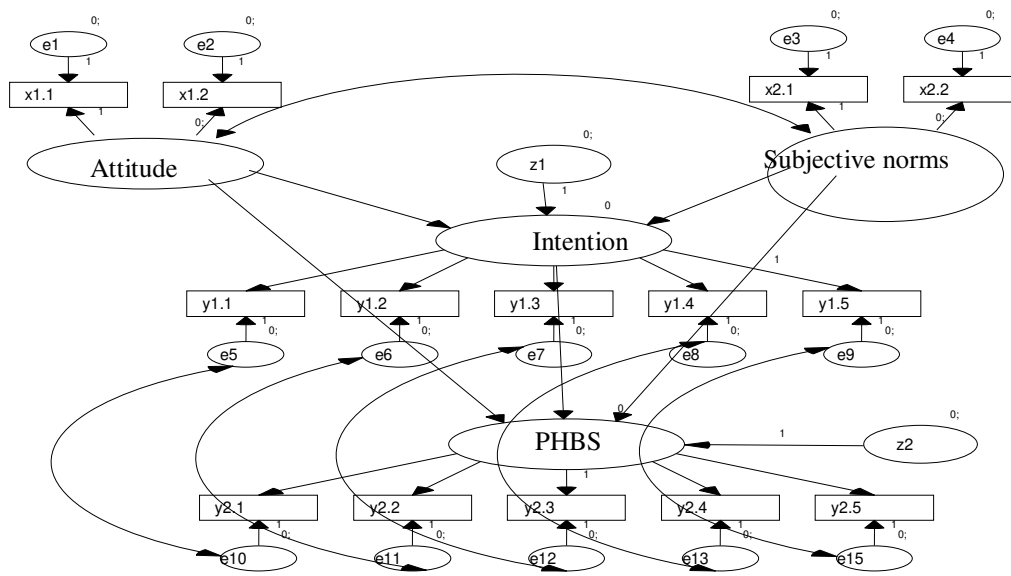
Fishbein and Ajzen define attitudes as predisposing factors or objects that exist in a person who is studied to respond consistently, which describes a person's likes or dislikes toward a given object. Therefore, attitudes often come from one's own experience or from the closest people (Fishbein, M., & Ajzen, I, 1975), for example from parents, siblings, other masters. The results of these studies are in line with research which concludes that attitudes have a positive and significant influence on intention (Y.Ko, et al, 2011; Arum M.A & Mangkunegara, 2010; Cheng, MF & JuTung, P 2014).

Subjective norm does not affect the intention and subjective norm toward normative beliefs, but subjective norms affect Outcome Evaluations (C, R = 29,657; p = 0,000). The result of this research is in line with one of the beliefs influenced by subjective norm that is motivation to comply is one's motivation to fulfill the expectation of reference party (Ajzen, I, 2005), but in contrast to other studies suggest subjective norms have the strongest influence on intent and will increase a person's intention to engage in behavior. The results of this study also contrasted with the results of the study stating that subjective norms with PEP (Prescribed Post Exposure Prophylaxis) have a significant direct effect on the intentions of nurses to comply with post-exposure management ($\beta = 0.15$) (Y.Ko, et al, 2011). The subjective norm is the important influence of others. This means that something that someone else deems important should be done by that person by performing certain behaviors (Engel, Blackwell, & Miniard, 2006).

The intention affected the intention of disposing of waste (C, R = 9,04; p = 0,00); The intention effected the intention of utilizing latrines (C, R = 7,395; p = 0,00); The intention affected the intention of not smoking in the market (C, R = 9,911; p = 0,00); intention affected the intention to wash hands with soap (C, R = 8,684; P = 0.00), but intention to behave clean and healthy does not affect the intention of throwing away spit. Behavioral intention is a proxy measure of behavior. It represents a person's motivation in the sense of her or his conscious plan or decision to perform a certain behavior. Generally, the strong the intention is, the more likely the behavior will be performed (Corner, M, & Armitge, C, J, 1998). TRA assumes that the most important direct determinant of behavior is the behavioral intention. Success of the theory in explaining behavior depends on the degree to which the behavior is under volitional control (that is, individuals can exercise a large degree of control over the behavior). It is not learned that the TRA components are sufficient to predict behaviors in which volitional control is reduced. Thus, Azjen and colleagues added Perceived behavioral control to TRA to account for factors outside individual control (Ajzen, I, 1991; Ajzen and Driver, B.L, 1991; Ajzen I & Madden, TI, 1986).

Clean and healthy behaviors affect non-smoking behavior in the market (C, R = 6.995; p = 0.00); Clean and healthy behavior affects handwashing with soap (C, R = 7,626; p = 0.00), but does not affect the use of latrines and removal of saliva. The results of this study contradict research that concludes that there is a difference in trust between women who behave early and those who do not behave (Tania E. Mason & Katherine M. White, 2007).

The Goodness of Fit results show a marginal fit model for 5 requirements ≥ 0.90 (NFI = 0.866, RFI = 0.815, IFI = 0.887, NNFI / TLI = 0.843, CFI = 0.886). Here are the figures and tables of final models.



Description:

- X1 = Attitude
 - X1.1 = Behavioral Beliefs
 - X1.2 = Outcome Evaluations
- X2 = Subjective Norms
 - X2.1= Normative beliefs
 - X2.2= Motivation to Comply
- Y1 = Intention
 - Y1.1= the intention to wash hands with soap
 - Y1.2= the intention of not smoking in the market
 - Y1.3= the intention of utilizing latrines
 - Y1.4= the intention of disposing of waste
 - Y1.5= the intention of throwing away spit
- Y2 = Clean and healthy Behavior (PHBS)
 - Y2.1= hand washing behavior with soap
 - Y2.2= non-smoking behavior in the market
 - Y2.3= utilizing latrines
 - Y2.4= disposing of waste
 - Y2.5= throwing away spit

Table 2
The Result All Model

No	Regression model		Estimate	S.E.	C.R.	P
1	Y1	← X1	0.731	0.147	4.962	0.000
2	X1.1	← X1	1.000			
3	X1.2	← X1	1.018	0.032	31.314	0.000
4	Y1	← X2	-0.176	0.150	-1.169	0.242
5	X2.1	← X2	1.000			
6	X2.2	← X2	1.060	0.035	29.657	0.000
7	Y1.1	← Y1	1.472	0.169	8.684	0.000
8	Y1.2	← Y1	1.779	0.179	9.911	0.000
9	Y1.3	← Y1	1.033	0.139	7.395	0.000
10	Y1.4	← Y1	1.410	0.155	9.040	0.000
11	Y1.5	← Y1	1.000			
12	Y2.1	← Y2	1,344	0,176	7,626	0.000
13	Y2.2	← Y2	1.014	0,145	6,995	0.000
14	Y2.3	← Y2r	1.000			
15	Y2.4	← Y2	0.316	0.134	2.357	0.01
16	Y2.5	← Y2	-0.204	0.135	-1.510	0.130

4. Conclusion

Attitudes influenced outcome evaluation, subjective norm influenced motivation to comply, intention to live clean and healthy influence 4 indicators, clean and healthy life behavior is influenced by 4 indicators.

Conflict of interest statement and funding sources

The authors declared that they have no competing interest. The study was financed by the authors themselves.

Statement of authorship

The authors have a responsibility for the conception and design of the study. The authors have approved the final article.

Acknowledgments

Acknowledgments to the Ministry of Research and Technology of Higher Education and STIKES Surya Global Yogyakarta who supported the fund for this research. Also thanks to my promoter and co-promoter at the Graduate Programs in Health Promotion and Community Empowerment Sebelas Maret University and colleagues who I can not mention one by one.

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