# FACTORS RELATED TO COMMUNITY WASTE MANAGEMENT IN KOTA BARU DISTRICT JAMBI CITY IN 2022

*by* Willia Novita Eka Rini

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# FACTORS RELATED TO COMMUNITY WASTE MANAGEMENT IN KOTA BARU DISTRICT JAMBI CITY IN 2022

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## ABSTRACT

**Background :** Garbage is the remnant of human daily activities in solid or semi-solid form which is considered to have been no longer useful and thrown into the environment. Everything that is active will definitely produce waste. The problem of waste is always a discussion because it is related to the lifestyle and culture of the community itself. Waste that is not managed properly can cause environmental pollution and health problems. **Objectives:** This study is to find out what factors are related to waste management in the community to reduce the amount of waste generation in Kota Baru District, Jambi City. **Methods:** This research is an analytical survey research with a cross-sectional study design. The population is 80,062 families with a sample of 106 respondents. sampling technique using stratified random sampling technique. The variables in this study are knowledge, attitudes, subjective norms and control over behavior, as well as waste management behavior. This research uses questionnaires and observation sheets. Data analysis using chi-square test with SPSS version 22.**Results:** There is a significant relationship between knowledge, behavior control and waste management, there is no significant relationship between attitudes, subjective norms and waste management. **Conclusion:** Knowledge and control of behavior greatly affect waste management. It is suggested to the sub-district of the new city to increase public knowledge by providing information in the form of posters and so on as well as increasing waste management facilities.

*Keywords: waste management, knowledge, behavioral control.*

**INTRODUCTION**

Waste is material that is discarded or no longer used in human activities. In Law No. 18 of 2008 concerning Waste Management, waste is the remainder of human daily activities in the form of solid or semi-solid which is considered no longer useful and is thrown into the environment. Garbage problems are often encountered in everyday life. Garbage that accumulates can affect the health and aesthetics of the environment. Law Number 18 of 2008 concerning Waste Management explains that in terms of reducing waste, it includes restrictions on waste generation, recycling of waste, and reuse of waste. One of the community's efforts to help overcome the waste problem is to familiarize themselves with 3R waste management (reduction, reuse, recycle). The community also selects waste before it is disposed of to the TPS, the waste is separated into 2 types of waste, namely inorganic and organic waste. Without a segregation process, waste processing becomes difficult and expensive, increasing the risk of pollution and health hazards.

In 2025, it is estimated that the amount of waste produced globally will reach 2.2 billion tons/year. This figure will certainly increase along with the increase in population every year. In Indonesia, according to the Ministry of Environment and Forestry (KLHK), national waste in 2020 has reached a total production of 67.8 million tons. Each resident produces about 0.68 kilograms of waste per day. This means that 270 million people produce around 185,753 tons of waste every day. Based on the 2018 Indonesia Environmental Indifference Behavior Index Report, which also cites Susenas data, states that 53% of Indonesian households use methods that are harmful to the environment in waste management, namely by burning it, and only 1.1% of households manage their waste. further by being recycled, or made into compost, or deposited in a waste bank. Burning waste causes greenhouse gas emissions and air pollution has a negative impact on the environment and health.

In Indonesia, Jambi Province is in 16th position with the amount of waste generated reaching 287,374.46 tons. In the city of Jambi, the volume of waste generated is 423,446.09 kg per day and only 316,175.92 kg of waste transported to the TPA are carried out per day. For Kota Baru District, based on data on Jambi City's 2019 Waste Generation, Kota Baru District has the highest waste generation reaching 54,633.47 Kg/Day and only 40,975.10 Kg/Day transported to the TPA. This number will continue to increase along with population growth. From the results of the location survey in the new city sub-district, it was found that the problem of mixed organic and inorganic waste still piling up in TPS and scattered on the roadside. Garbage that accumulates in TPS causes unpleasant odors and damages the aesthetics of the surrounding environment, leachate from piles of garbage can contaminate surface water, soil and can cause disease. Garbage contains various viruses, parasitic bacteria that can transmit directly or indirectly. For this reason, it is necessary to do good waste management from the source so that waste problems can be handled and do not have an impact on health and the environment.

Garbage can be a risk factor for a disease. Garbage contains various viruses, parasitic bacteria that can transmit directly or indirectly. Direct transmission is the route of transmission in which the disease is transmitted directly from waste to humans. This transmission route occurs when a person comes into direct contact with garbage that contains germs, viruses or parasites. Indirect transmission occurs when garbage becomes a breeding ground for disease-causing animals, such as mosquitoes,

flies, and rats. Various diseases that can be caused such as diarrhea, dysentery, intestinal worms, malaria, and dengue fever. Some of the factors that influence waste management, namely education, knowledge, attitudes, support from community leaders, subjective norms, control over behavior and the availability of infrastructure are one of them.

Knowledge is the result of "knowing" this occurs after people sense a certain object, especially through the eyes and ears. Knowledge has an effect on changing a person's behavior, such as public knowledge of waste management. The process is based on awareness knowledge and a positive attitude, then the behavior will be long. Conversely, if the behavior is not based on knowledge and awareness, it will not last long. Knowledge of people with low levels of education, knowledge of waste management is also low, for example the separation of waste between inorganic and organic types of waste, people with low knowledge cannot distinguish.

Attitude is the extent to which a person has an acceptable or unacceptable evaluation or assessment, likes or dislikes behavior. in this case behave in waste management. In general, a person will do a positive attitude that benefits him compared to an attitude that causes harm to him. It can be concluded that attitude is a behavior that is believed to produce positive results compared to behavior that produces negative results. Attitudes that are considered positive are choices that individuals make in their lives. The attitude of the community has not been able to accept the ways of good waste management, so that a lot of waste is ignored or left unattended without thinking about the negative risks to health, this is because the habits of people's attitudes are not guided by health science about waste.

Subjective norms, the second major determinant of intention in the theory of planned behavior, are also assumed to be a function of beliefs, but beliefs of a different kind, namely one's belief that a particular individual or group approves or disapproves of performing the behavior. Subjective norms are factors that are social in nature about a person's perception of social pressure to perform or not to perform a behavior. Subjective norms are individuals who are motivated to follow the behavioral perspective of others. Subjective norms aim to find out whether there is support from other people who are considered important.

Control of behavior is a consideration of things that can facilitate or hinder the conduct of behavior. Perception of behavioral control is the perception of the ease or difficulty in performing the behavior. A person tries to perform an action when they find it easy to do it because something is helping them. The behavior of managing waste in the community by burning is formed by the control beliefs factor, namely the belief that there is something that facilitates behavior in the form of a place to burn such as a home page. It is also strengthened by the perceived behavioral control factor, namely the consideration of facilitating factors in the form of favorable weather and opportunities/free time and the normative beliefs factor, namely the individual's belief that the behavior of burning garbage is not a problem for others.

**METHODS**

This study used an analytical survey method with a cross sectional approach. The sampling technique used is Stratified random sampling. The population is 80,062 families with a total sample of 106 respondents. The independent variables in this study are knowledge, attitudes, subjective norms and

control over behavior, while the dependent variable is waste management. willing to be a respondent. This research was conducted in March 2022. Then the research data were analyzed using the chi-square test.

## RESULTS

### Univariate Analysis

Based on table 1 that the characteristics of respondents based on male sex are 27 people (25.5%) and female sex are 79 people (74.5%), the characteristics of respondents based on housewife work are 76 (71.7%). %), private sector as many as 24 people (22.6%) and civil servants 6 people (5.7%). There are 52 people (48.1%) who have poor knowledge and 55 people (51.9%). The description of people's attitudes that have a bad attitude are 50 people (47.2%) and 56 people are good (52.8). There are 31 people (29.2%) who have negative subjective norms and 75 people (70.8%). The description of the control on the behavior of people who have control over negative behavior is 58 people (54.7%) and 45.3% are positive). The description of waste management in the community that has poor waste management is 58 people (54.7%) and 48 people (45.3%) are good.

### Bivariate Analysis

Based on table 2. The results showed that (42.5%) of respondents had poor waste management knowledge, with a p-value of 0.00 <0.05, meaning that there was a significant relationship between knowledge and waste management in the community. The PR value is 3.733 and 95% CI 2.297-6.006, which means that respondents who have poor knowledge are 3,733 times more at risk of having poor waste management compared to respondents who have good knowledge.

Based on table 3, the results show that (22.6%) of respondents have a bad attitude towards waste management in the community, with a p-value of 0.132>0.05, meaning that there is no relationship between attitudes and waste management in the community. The PR values are 0.791 and 95% CI 0.553-1.140, which means that respondents who have a bad attitude are 0.791 times more at risk of having poor waste management compared to respondents who have a good attitude.

Based on table 4, the results show that (18.9%) of respondents have negative subjective norms towards waste management in the community, with a p-value of 0.138>0.05, meaning that there is no relationship between subjective norms and waste management in the community. The PR value is 1.273 and 95% CI 0.903-1.795, which means that respondents who have negative subjective norms are 1.273 times more at risk of having poor waste management compared to respondents who have positive subjective norms.

Based on table 5, the results show that (42.5%) of respondents have control over negative behavior towards waste management in the community, with a p-value of 0.00> 0.05 meaning that there is a relationship between control of negative behavior and waste management in the community. The PR value is 2.565 and 95%CI is 1.765-4.650, which means that respondents who have control over negative behavior are 2.565 times more at risk of having poor waste management compared to respondents who have control of positive behavior.

**DISCUSSION**

**Cross Tabulationa of Knowladge with Waste Management at Kota Baru District,Jambi City.**

From the analysis results obtained a relationship between knowledge and waste management in the community with a P-Value value of 0.00<0.05 and a Prevalence Ratio (PR) value of 3.733 with a 95%CI of 2.297-6.006. Which means, respondents with poor knowledge are 3,733 times more at risk of having poor waste management compared to respondents with good knowledge. Public knowledge about waste management which is defined as knowledge consisting of the understanding of waste, types of waste, sources of waste, factors that affect waste production, the effect of waste on health and the environment, activities in waste management and tools used in waste management and how to dispose of waste. rubbish. It can be concluded that knowledge comes from reason with reasoning, the result of knowing from one's own experience or the experience of others which is a very important domain for the formation of action. It is necessary to increase public knowledge in managing waste obtained from socialization and counseling as well as information from print media such as posters, pamphlets about how to manage waste properly.

**Cross Tabulationa of Attitudes with Waste Management at Kota Baru District, Jambi City.**

From the analysis results there is no relationship between attitude and waste management in the community with a P-Value value of 0.132> 0.05 and a Prevalence Ratio (PR) value of 0.791 with a 95% CI of 0.533-1,140. Which means, respondents with unfavorable attitudes are 0.791 times more at risk of having poor waste management compared to respondents who have good attitudes. Attitude is a tendency to accept or reject an activity in this case waste management behavior based on a person's experience, knowledge, and norms. Attitude is a reaction or response of someone who is still closed to an object. Boedjo in Prawidya argues that an individual's attitude towards his environment can be in the form of an individual rejecting his environment, namely if the individual is not in accordance with his environmental conditions, an individual who accepts his environment, namely if the environmental conditions match the individual's circumstances, and individuals who are neutral if the individual does not get compatible with the environmental conditions but in this case the individual does not take further steps as should behave. people think that managing waste is something that is too difficult and complicated to do because they have to provide a special place for sorting wet and dry waste, processing food waste into compost and so on so that respondents think it is more practical if waste is burned, and according to respondents burning garbage is a simple matter. the usual.

**Cross Tabulationa of Subjective Norm with Waste Management at Kota Baru District, Jambi City.**

From the results of the analysis there is no relationship between subjective norms and waste management in the community with a P-Value value of 0.138>0.05 and a Prevalence Ratio (PR) value of 1.273 with a 95%CI of 0.903-1.795. Which means, respondents with negative subjective norms are 1,273 times more at risk of having poor waste management compared to respondents who have positive subjective norms. Subjective norms are the pressure felt by individuals to perform or not

to perform certain behaviors. Subjective norms can be measured by assessing a person's perception of the influence of others who are his role models, such as family, neighbors, coworkers, and even experts who will approve or disapprove of certain behaviors he does. The results in the field show that respondents agree to manage waste when there is encouragement from family members, neighbors who are the closest environment to them. But in reality, family members or neighbors do not encourage each other to manage waste, so the respondents also do not manage waste.

**Cross Tabulationa of Behavioral Control with Waste Management at Kota Baru District, Jambi City.**

From the results of the analysis there is a relationship between control of behavior and waste management in the community with a PV value of 0.00 <0.05 and a Prevalence Ratio (PR) value of 2.565 with a 95% CI of 1.765-4.650. Which means, respondents with control over negative behavior are 2,565 times more at risk of having poor waste management compared to respondents who have control over positive behavior. Control of behavior is defined as a person's perception of the presence or absence of opportunities or convenience needed to perform a behavior. Control parameters on behavior include facilities, economic capacity, time owned by respondents, socialization from the village/kelurahan regarding waste management, availability of waste transport services, and sanctions for poor behavior in managing waste. From the results of interviews with respondents, respondents do not have much time to manage waste, there is no socialization and sanctions are given to the community from the village / urban village if they do not manage waste so that people do not manage waste.

**CONCLUSION**

From the results of research conducted in Kota Baru District, Jambi City, it can be concluded that there is a relationship between knowledge and control of behavior with waste management in the community. Meanwhile, there is no relationship between attitudes and subjective norms towards waste management in the community.

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**Table 1. Characteristics of Respondents, Knowledge, Attitudes, Subjective Norms, Control of Behavior, Waste Management**

| No | Characteristics Respondents | Frequency [f] | | Percent [%] | |
|---|---|---|---|---|---|
| | **Gender** | | | | |
| 1 | Male | 27 | | 25,5 | |
| | Female | 79 | | 74,5 | |
| | Total | 106 | | 100 | |
| | **Jobs** | | | | |
| | Housewife | 76 | 71,7 | | |
| 2 | Entrepreneur | 24 | 22,6 | | |
| | PNS | 6 | 5,7 | | |
| | Total | 106 | | 100 | |
| | Knowledge | | | | |
| 3 | Good | 55 | | 51,9 | |
| | Bad | 51 | | 48,1 | |
| | Total | 106 | | 100 | |
| | Attitude | | | | |
| 4 | Good | 56 | | 52,8 | |
| | Bad | 50 | | 47,2 | |
| | Total | 106 | | 100 | |
| | Subjectif Norm | | | | |
| 5 | Positive | 75 | | 70,8 | |
| | Negative | 31 | | 29,2 | |
| | Total | 106 | | 100 | |
| | Behavioral Control | | | | |
| 6 | Positive | 48 | | 45,3 | |
| | Negative | 58 | | 54,7 | |
| | Total | 106 | | 100 | |
| 7. | Waste Management | | | | |
| | Good | | 48 | | 45,3 |
| | Bad | | 58 | | 54,7 |
| Total | | | 106 | | 100 |

**Table 2. Cross Tabulationa of Knowladge with Waste Management at Kota Baru District, Jambi City.**

| Knowledge | Waste Management | | | | | Total | |
| | Bad | | Good | | | | |
| | n | % | N | % | N | | % |
| Bad | 45 | 42,5 | 6 | 5,7 | 51 | | 100 |
| Good | 13 | 12,3 | 42 | 39,6 | 55 | | 100 |
| Total | 58 | 54,7 | 48 | 45,3 | 106 | | 100 |
| *P-Value* | 0,00 | | | | | | |
| PR (95%CI) | 3,733 (2,297-6,006) | | | | | | |

**Table 3. Cross Tabulationa of Attitudes with Waste Management at Kota Baru District, Jambi City.**

| Attitudes | Waste Management | | | | | | |
| | Bad | | Good | | Total | | |
| | n | % | n | % | N | % | |
| Bad | 24 | 22,6 | 26 | 24,5 | 50 | 100 | |
| Good | 34 | 32,1 | 22 | 20,8 | 56 | 100 | |
| Total | 58 | 54,7 | 48 | 45,3 | 106 | 100 | |
| *P-Value* | 0,132 | | | | | | |
| PR (95%CI) | 0,791 (0,553-1,140) | | | | | | |

**Table 4. Cross Tabulationa of Subjective Norm with Waste Management at Kota Baru District, Jambi City.**

| Subjective Norm | Waste Management | | | | | | |
| | Bad | | Good | | Total | | |
| | n | % | N | % | N | % | |
| Negative | 20 | 18,9 | 11 | 10,4 | 31 | 100 | |
| Positive | 38 | 35,8 | 37 | 34,9 | 75 | 100 | |
| Total | 58 | 54,7 | 48 | 45,3 | 106 | 100 | |
| *P-Value* | 0,138 | | | | | | |
| PR(95%CI) | 1,273 (0,903-1,795 | | | | | | |

**Table 5. Cross Tabulationa of Behavioral Control with Waste Management at Kota Baru District, Jambi City.**

| Behavioral Control | Waste Management | | | | | | |
| | Bad | | Good | | Total | | |
| | N | % | N | % | N | % | |
| Positive | 45 | 42,5 | 13 | 12,3 | 58 | 100 | |
| Negative | 13 | 12,3 | 35 | 33,0 | 48 | 100 | |
| Total | 58 | 54,7 | 48 | 45,3 | 106 | 100 | |
| *P-Value* | 0,00 | | | | | | |
| PR (95%CI) | 2,565 (1,765-4,650) | | | | | | |

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FINAL GRADE

## /1000

GENERAL COMMENTS

**Instructor**