

3R Pattern Waste Management (Reduce, Reuse, Recycle) Through a Review of the Social Behavior Theory Perspective in SMPN 1 Jenggawah

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Abstract: Waste management using the 3R pattern (Reduce, Reuse, Recycle) has become one of the strategic steps in reducing the negative impact of waste on the environment. In the school context, especially at the junior high school (SMP) level, the 3R pattern not only supports environmental programs, but also shapes students' social behavior. The existence of waste problems in schools cannot be separated from the role of students as waste producers from their daily activities. The waste problem requires serious management to reduce the quantity of waste. The waste problem also requires a solution at the source of the waste generation. Educational units play a role in forming the character of students who care about the environment. In creating a clean environment, there is a government program in the form of the 3R Waste Processing Site (TPS) activity program (reduce, reuse and recycle). Waste management using the 3R (Reduce, Reuse, Recycle) pattern at junior high school level is an important thing to do, not only to maintain the cleanliness of the school environment, but also as a means of social education for students. This article examines the application of the 3R pattern through a review of social theory perspectives, including theories of social behavior, symbolic interaction, structuration, and social ecology. Through this approach, waste management can be understood as a process of forming environmentally responsible social behavior. Implementation of the 3R pattern at SMP 1 Jenggawah involves education, active student participation, provision of supporting facilities, and regular evaluation. By involving all school elements, including students, teachers and the surrounding community, 3R waste management not only reduces the impact of waste, but also forms a social culture that cares about environmental sustainability.

Keywords : waste management, 3R, social behavior theory.

1. INTRODUCTION

Waste management is an important issue faced by various groups, including in the school environment. One effective approach in overcoming this problem is the application of the 3R pattern, namely Reduce, Reuse and Recycle. Junior High Schools (SMP) as educational institutions are trying to create a clean and healthy environment by involving students in sustainable waste management activities. However, the success of implementing the 3R pattern in junior high schools cannot be separated from the behavior of students and teachers in carrying out this practice. One approach that can be applied is the 3R pattern, which consists of Reduce, Reuse and Recycle. At junior high school level, the introduction and implementation of the 3R pattern is not only useful for maintaining a clean environment, but can also increase students' awareness of the importance of responsible behavior towards waste.

Formal education through school has a very important role in a person's life. Apart from providing knowledge and knowledge, schools also function as social institutions that help develop individuals into social beings who can adapt well in society (Husti, 2022). In attending school, students not only gain knowledge, but also make friends, relationships,

and practice communication with other people. Schools also help students develop their personalities as a whole, improve and refine their behavior, and help develop their potential. Apart from that, schools also have a role in maintaining cultural heritage and developing social awareness and environmental awareness. Thus, the role of schools is very important in helping students become better individuals and contribute to the sustainability of society.

The environment is a place that is closely related to living creatures, especially humans, and the environment is also a place for all human activities, both directly and indirectly. The environment is a source of life for humans. No matter how much money a person has, he will not be able to live without a supportive environment. Humans need air to breathe from the environment, they need water to drink from the environment, and all food ingredients come from the environment. As the opinion of (Effendi 2018) defines "the environment as everything around living creatures that influences their lives. Humans will have a quality life if they are supported by a quality environment too. Effective waste management is an important aspect in maintaining environmental cleanliness and sustainability.

Through the perspective of social behavior theory, this article will discuss individual attitudes and actions in waste management in the junior high school environment. Social behavior theory emphasizes the importance of interactions

between individuals and their environment, as well as how social norms and group influence can shape behavior related to waste management. By understanding these dynamics, it is hoped that waste management using the 3R pattern can be optimized, so that it not only has a positive impact on the environment, but also forms the character of students who care about cleanliness and sustainability. This article will present an in-depth analysis of the implementation of the 3R pattern in junior high schools, with a focus on strategies and efforts that can be made to increase awareness and involvement of students and teachers in better waste management.

In Indonesia itself, there is a policy that regulates waste issues, namely Law Number 18 of 2008 concerning Waste Management which discusses waste reduction and handling [6]. However, in reality the waste management aspect has not been carried out optimally (Hendra, 2016). What is wrong with our educational environment so far? Did our parents never teach us to throw away rubbish in the right place? Does school never teach you to maintain cleanliness? Should there be a set of regulations and fines with repressive enforcement, so that citizens comply with maintaining cleanliness? School policy prohibits all school residents from throwing rubbish carelessly, and the school also issues rules and regulations as an Adiwiyata school, one of which is: 1) every school member is required to care about rubbish by throwing rubbish in its place, 2) picket officers are required to clean the classroom and the surrounding environment. If the task is not carried out, the picket team is given a sanction to clean the classroom and surrounding area, 3) every school member eats at his/her place (canteen/dining room) and maintains cleanliness.

Ideally, as stated above, we as school members should be obliged to carry out what is our responsibility in terms of deregulating policies regarding environmental care through waste. However, the reality is that school residents are not yet aware of the importance of protecting the school environment. They have not been able to maintain the cleanliness of the school environment, such as throwing rubbish out of place and sometimes students do not care about the cleanliness of their school environment. The problem discussed in this research is the 3R pattern of waste management (Reduce, Reuse and Recycle) through a review of the perspective of social behavior theory at SMP Negeri 1 Jenggawah. So it is very important for us to instill an attitude or character that cares about the environment in students within the school environment and the environment where they live, as is done at SMPN 1 Jenggawah. The research results show that 3R waste management (reduce, reuse, recycle) to foster environmentally caring character can be carried out, as follows: 1) Example of Reduce, namely the use of paper can be replaced by collecting papers or assignments in social studies learning using softfile only or via digital device; 2) Example of Reuse, namely waste management can be done by reusing plastic items. Students can use reusable drinking bottles, and 3) Example of recycling, namely waste management with a recycling concept divided into three, namely organic (wet), inorganic and B3 waste management.

For example, managing organic (wet) waste into compost, managing inorganic waste into crafts and learning media that can help teachers in providing more efficient learning to students who are sexy and strict, use very thick make-up and so on.

Developing a moral national character is not only about teaching ethical and moral theory as a subject at school, but also about building sustainable habits every day. Children need role models who can serve as examples. The example of the people around them is the basis for forming moral concepts in children (Widiyaningrum et al., 2016). The formation of a child's personality is influenced by internal factors, the surrounding environment, parenting patterns, and education at school. Therefore, parents and teachers must be consistent in providing understanding and examples of good and bad things to children (Ismail, 2021).

Waste problems that are not managed properly can cause widespread negative impacts, including environmental pollution, the spread of disease, and other losses. Therefore, proper waste handling needs to be carried out at all levels, including at the village level (Putra et al., 2021). There needs to be an effort to build collective awareness among school residents to maintain a clean environment by getting used to throwing away rubbish in its proper place. What's more, the side effects of the accumulation of waste include a source of disease transmission, disturbing aesthetics, and reducing comfort levels.

Jenggawah 1 Public Middle School is a public middle school located in a lowland area with tropical geographical conditions, with a total of 1070 students while teaching and non-teaching staff number 65 people. With the condition of the large number of students and teaching staff and the availability of trash cans in every corner, it is felt that they are not sufficient to accommodate the rubbish that piles up every day and is still scattered everywhere.

Maintaining the cleanliness of the environment is not just the job of the Yellow Army (Cleaning Officers or the Cleaning Service only). The ignorant and misguided attitude of some people that having paid the cleanliness levy means that cleaning and disposing of rubbish is the government's job, must end. Correct waste management is in addition to protecting the environment so that keeping it clean can also have economic value. Waste which is often considered a problem can be managed so that it adds value. This sincere intention is certainly not easy, it requires gradual advocacy and outreach to the community according to their level of understanding so that it becomes a habit and lifestyle and not because of it. there are prohibitions in the rules written. Finally, not littering is one of the social movements to bring awareness to oneself, family, society and leaders, commitment to maintaining cleanliness, protecting the environment as a habit and lifestyle in order to create an environmentally friendly city.

2. THEORETICAL REVIEW

2.1 Waste management concept and 3R principles.

2.1.1 Application of 3R Principles in School Activities

The 3R pattern can be integrated into various activities at school. For example, educational programs regarding the importance of reducing waste can be carried out through environmental classes. Apart from that, recycling activities can be carried out by collecting unused plastic or paper bottles. By involving students in this activity, they not only learn about waste management, but also apply it directly in everyday life. Activities such as recycling competitions or making crafts from used materials can increase students' awareness of the importance of waste management.

2.1.2 Waste Management with the 3R Pattern (Reduce, Reuse, Recycle)

Waste management is an important issue that affects environmental quality, including the school environment. One effective approach to reducing the negative impact of waste is to apply the 3R pattern, namely Reduce, Reuse and Recycle.

- Reduce focuses on efforts to reduce the amount of waste produced, either by reducing consumption of single-use items or minimizing the use of natural resources.
- Reuse invites you to reuse items or materials that can still be used before being thrown away or recycled.
- Recycling aims to recycle waste into new, useful items, reduce the need for new items, and reduce the amount of waste that accumulates.

Implementing the 3R pattern in schools not only functions to maintain a clean and healthy environment, but also provides education to students about the importance of environmental awareness. Research shows that effective implementation of the 3R pattern in schools can reduce the amount of waste produced and increase students' awareness of environmental issues (Sudarsono, 2015).

2.1.3 Studies Related to Waste Management in Schools

Several studies show that implementing waste management using the 3R pattern in schools not only has a positive impact on the environment, but can also increase students' knowledge and awareness of the importance of environmental sustainability. Research by Kurniawan (2017) in several secondary schools showed that the implementation of the 3R pattern supported by educational activities and strict supervision resulted in a significant reduction in the amount of waste produced in schools. In addition, students tend to be directly involved in recycling and waste sorting activities care more about the environment and are able to influence the behavior of their friends.

2.2 Social Behavior and Social Behavior Theory

Social behavior refers to individual actions or attitudes that are influenced by interactions with other people in a group or society. In the context of waste management in schools, students' social behavior plays a very important role in the successful implementation of the 3R pattern. Factors such as social norms, peer group influence, and behavioral

models displayed by teachers and school staff will influence whether students will adopt this waste management pattern.

The theory of social behavior, put forward by Albert Bandura through the concept of Social Learning Theory, suggests that individuals learn from observing and imitating the behavior of other people around them. In the context of waste management, students will be more likely to follow positive behavior demonstrated by teachers, peers, or the school environment, especially if they see that this behavior is appreciated or socially accepted. This is in line with Social Norm Theory, which shows that individuals tend to follow the norms that exist in their social group to be accepted and respected (Cialdini & Trost, 1998).

2.3. Social Behavior Theory and Its Application in Environmental Contexts

Understanding Social Behavior Theory in the Context of Waste Management. Social behavior theory explains how individuals interact with each other and how the social environment influences individual behavior. In the junior high school environment, students are often influenced by their peers and school culture in terms of their waste disposal habits. By utilizing the principles of social behavioral theory, teachers and school administrators can create an environment that supports good waste management practices. For example, if peers are active in waste reduction, other individuals are more likely to follow suit.

2.4 Functional Structure Theory and Waste Management in Schools

Functional structure theory, developed by Émile Durkheim and Talcott Parsons, views society or a social system as a unit consisting of elements that interact with each other to maintain the stability and prosperity of the system. Each component in a social system has a specific function to support shared goals [2]. In the school context, waste management using the 3R pattern can be considered as one of the "functions" needed to maintain the stability and comfort of the learning environment.

In the functional structure perspective, schools are seen as a social system consisting of various components such as students, teachers, administrative staff, and school facilities that interact with each other to achieve common goals. The function of waste management using the 3R pattern is to create a clean, healthy environment and support the education process. Waste management can also form social norms that support behavior environmental awareness among students and school staff, which in turn strengthens environmental awareness in the wider community.

From a social theory perspective, what I am reviewing in this case is that using functional structure theory (Structural Functionalism) can be used to analyze how various components in a social system (school) interact to support or hinder the implementation of the 3R pattern. This theory, developed by sociologists such as Émile Durkheim and Talcott Parsons, assumes that each part of society or a social system has certain functions that contribute to the stability and

well-being of that system. 3R pattern waste management in junior high schools can be explained through several theories that provide an overview of how social values and norms influence the behavior of individuals and groups in society.

Functionalism theory, developed by Émile Durkheim and expanded by figures such as Talcott Parsons and Robert K. Merton, is one of the main approaches in sociology. This approach views society as a system consisting of interconnected parts, where each part has a specific function to maintain social stability and order. The following is the development of this theory in the context of waste management using the 3R pattern (Reduce, Reuse, Recycle) [4].

1. Émile Durkheim's perspective

Durkheim, as the originator of functionalism theory, loved society as a living organism [2]. According to him:

- Social solidarity: The 3R pattern can be seen as a mechanism of mechanical solidarity (in traditional societies) or organic solidarity (in modern societies).
- In traditional societies, waste management is often based on the value of mutual cooperation.
- In modern society, the 3R pattern is a shared responsibility through collaboration between government, the private sector and individuals.
- Division of labor: In 3R management, division of tasks (production, collection, recycling) creates social integration that strengthens community stability.

2. Development by Talcott Parsons

Parsons developed functionalism theory with the concept of AGIL (Adaptation, Goal Attainment, Integration, Latency):

- Adaptation: The 3R pattern is society's adaptation to global environmental problems, such as the waste crisis and climate change.
- Goal Attainment (Goal Achievement): The goal of the 3R pattern is to create a clean and sustainable environment. The government sets policies to ensure this goal is achieved.
- Integration: The 3R program promotes social integration through joint campaigns, public participation and cross-sector collaboration.

Latency (Pattern Maintenance): Public education and instilling environmentally friendly values maintains the sustainability of the 3R pattern in the long term.

3. Robert K. Merton Perspective

Merton introduced the concept of manifest function and latent function to understand the impact of a policy or social practice [4].

- Manifest function: The explicit goal of the 3R pattern is to reduce the volume of waste, encourage reuse and recycle waste to preserve the environment.
- Latent function:
 - Increase public awareness about the importance of sustainability.

- Encourage economic innovation, such as the recycling industry and waste banks.
- Strengthening social relations through collective programs such as community service or environmental care communities.

Waste management program through 3R (Reuse, Reduce and Recycle)

The application of waste with the 3R concept (Reuse, Reduce and Recycle) can be a solution in our school to preserve the surrounding environment in a very easy and cheap way. Processed waste can be used as compost or even become a new source of electricity. The application of the 3R concept can be applied by anyone every day. This concept has at its core, namely Reuse (Reusing waste that can still be used or has other functions), Reduce (Reducing everything that causes or gives rise to waste), Recycle (Reprocessing waste or recycling into a product or item that can be useful) .

There are several figures and concepts that strengthen and inspire the application of the 3R pattern (Reduce, Reuse, Recycle), which come from various scientific disciplines and environmental movements. These figures provide the philosophical, scientific, and practical foundations for the 3R movement through theories, works, and initiatives focused on sustainability and responsible resource management. Here are some of them:

1. Barry Commoner – " The Four Laws of Ecology "

Barry Commoner is an American environmental scientist and activist known for his Four Laws of Ecology. Commoner proposed that "Everything is interconnected," and "Nothing is lost in nature," which are important principles in the 3R pattern. This Commoner article invites us to look at the material cycle as a whole: whatever we produce and throw away will eventually return to the environment, so we need to be wiser in managing consumption and waste. Commoner's ecological view strengthens the concept of Reduce and Recycle by reminding the importance of maintaining natural balance [18].

2. Paul Hawken – Restorative Economics and Industrial Ecology

Paul Hawken, an environmental economist, is one of the main drivers in spreading the concepts of restorative economics and industrial ecology in line with the 3R principles. In his book *The Ecology of Commerce and Natural Capitalism*, Hawken suggests a more environmentally friendly approach to business and industry, where waste can be turned into resources through recycling and sustainable processes. His thoughts on resource efficiency, waste prevention, and circular economy encourage companies to apply the concepts of Reduce (reducing excess production and consumption) and Recycle in their operations [17].

3. David W. Orr – Environmental Education and Sustainability Ethics

David Orr, an environmental educator, emphasizes the importance of education in forming sustainable attitudes and

behavior, including in terms of waste management. Through his work, Orr encourages the application of the principles of Reduce and Reuse by educating the public to understand the long-term impacts of excessive consumption and waste. He believes that a sustainable approach in every aspect of daily life can be initiated through education and strong environmental awareness [15].

The thoughts of these figures strengthen the theoretical and practical basis of the 3R pattern, making it more than just a slogan but a sustainable approach that covers all aspects of life. Through their ideas, the 3R pattern developed into a philosophy that supports wise use of resources, product reuse, and recycling to create a more sustainable society. The following is an explanation of the 3R pattern:

1. Reduce

The thoughts of these figures strengthen the theoretical and practical basis of the 3R pattern, making it more than just a slogan but a sustainable approach that covers all aspects of life. Through their ideas, the 3R pattern developed into a philosophy that supports wise use of resources, product reuse, and recycling to create a more sustainable society. The following is an explanation of the 3R pattern The thoughts of these figures strengthen the theoretical and practical basis of the 3R pattern, making it more than just a slogan but a sustainable approach that covers all aspects of life. Through their ideas, the 3R pattern developed into a philosophy that supports wise use of resources, product reuse, and recycling to create a more sustainable society. The following is an explanation of the 3R pattern:

Well, below is one form of Reduce activity that has been carried out by teaching staff and by students at SMPN 1 Jenggawah.

- a. Using refillable printer ink
- b. Drink using reusable bottles, without plastic straws
- c. Eat with reusable containers, without stereofoms or mica etc.

2. Reuse

In 3R (Reduce, Reuse, Recycle), 'reuse' is the concept of reusing materials that can still be used and minimizing the amount of waste. This is done by reusing products that are no longer used. Contohnya dengan memanfaatkan kantong belanja yang sudah tidak digunakan lagi sebagai tempat sampah atau membuat tas belanja dari bahan-bahan bekas lain Di sini siswa siswa SMPN 1 Jenggawah memanfaatkan Kembali sampah .

The benefit of this concept, I can reduce the amount of waste produced and reduce the use of new natural resources. Applying the reuse concept can minimize negative impacts on the environment.

As has been done and produced by students at SMP Negeri 1 Jenggawah, one of which is making used pots as a planting medium by using used bottles in our school environment. Both planting media in water and planting media using soil. The benefit of the reduce concept is that it can reduce the use of natural resources and reduce the amount of waste produced. In this way, it will reduce the negative impact on the environment.

3. Recycle

Recycling is a great answer to dealing with the phenomenon of waste, but it will not eliminate the idea of waste, which is our mission. In 3R (Reduce, Reuse, Recycle), 'recycle' or recycling is the concept of reprocessing waste into materials that can be reused. I can do this by sorting waste and processing it into raw materials that can be reused.

Some examples of this concept are processing paper waste into recycled paper or processing plastic bottles into fiber that can be used to make other products such as clothes or bags. The benefits of the recycling concept are also the same, namely reducing the amount of existing waste and reducing the use of new natural resources. Through this method, it is hoped that it can reduce negative impacts on the environment and increase the efficiency of using natural resources.

By implementing the Reduce Reuse Recycle concept, apart from reducing the amount and impact of waste on the environment, the wider community can also increase their sense of concern and awareness of the environment. The activities we have carried out include:

Making Liquid and Solid Compost

1. Make liquid and solid compost
2. Recycle Paper Waste
3. Use used packaging from purchased products as much as possible

Segregated waste management program through the Waste Bank

1. Deposit sorted waste

Every waste collected by customers is then deposited with the waste bank management, then weighed and priced according to market price. Inorganic waste collected in waste banks is then sold back to collectors or recycled into various products such as bags, scarves, etc. Waste is deposited according to the amount and nominal value collected from each participant which will then be recorded in the savings book.

The results of waste deposits that have been saved can be collected within a certain time, namely once a month before Eid. It is hoped that waste management using the waste bank system will be able to help the government in handling waste which will ultimately provide benefits to the school environment and can increase students' creativity.

Implementation of 3R Waste Management in Middle Schools

To implement the 3R waste management pattern in junior high schools, several steps that can be taken include:

- Education and Training: Providing students with an understanding of the importance of the 3R pattern through educational activities, such as seminars, workshops or waste management competitions.
- Organization and Participation: Form a team or group that focuses on waste management, both at the classroom and school level. This activity can also involve parents and the surrounding community to increase awareness.

- Supporting Facilities: Providing separate trash bins in various locations in the school (for organic, inorganic and recyclable waste). This is important so that students can easily practice the 3R pattern in everyday life.
- Evaluation and Awards: Hold regular evaluations regarding the success of the 3R waste management program and give awards to classes or students who succeed in implementing this pattern well.

3. RESEARCH METHODS

3.1 Research Methods

The type of research used in this research is qualitative descriptive research with a qualitative social behavior theory approach, namely research conducted to analyze social life by describing the social world from the perspective of the interpretation of individuals (informants) in natural settings [3] in (Sudaryono, 2017: 91). This research aims to describe and analyze the implementation of the 3R (Reduce, Reuse, Recycle) waste management pattern at SMPN 1 Jenggawah through the perspective of social behavior theory. In this case, researchers will focus on the social behavior of students, teachers and other related parties in managing waste by minimizing, reusing and recycling waste, as well as what social strategies are used to change this behavior.

This research will use social behavior theory to analyze the behavior of students and teachers in waste management, namely the Functional Structure social theory, developed by Talcott Parsons, focusing on how various parts in a society or organization function to maintain the stability and balance of the system as a whole [5]. In the context of waste management using the 3R pattern (Reduce, Reuse, Recycle) at SMPN 1 Jenggawah, this theory can be used to understand how social behavior that occurs within the school environment contributes to achieving common goals, namely more effective and sustainable waste management.

Functional structure theory states that each part of a social system has certain functions that contribute to the stability and well-being of the system. In the context of waste management, schools as a social system have various interconnected components. In functional structure theory, social norms and values are considered as important elements that influence the stability of a system. In schools, norms and values related to waste management are things that greatly influence the implementation of the 3R pattern. For example, if the norms in the school support the habit of reducing, reusing and recycling waste, then this behavior will be more easily accepted and implemented by students and the entire school community.

3.2 Data Collections Instrumen and Technique

In research on "3R Pattern Waste Management (Reduce, Reuse, Recycle) Through a Review of the Social Behavior Theory Perspective at SMPN 1 Jenggawah," instruments and data collection techniques were used to explore the

understanding, behavior and experiences of various parties involved in waste management in schools [3]. The following are the instruments and techniques that can be used for data collection in this research:

1. Data Collection Instrument

a. Semi-Structured Interviews

Semi-structured interviews were used to gain in-depth information from students, teachers and school staff regarding 3R pattern waste management. This instrument allows researchers to further explore participants' views, attitudes, and experiences.

b. Participatory Observation

Participatory observation techniques involve researchers in waste management activities at schools to directly monitor how students, teachers and staff behave in managing waste. Researchers not only observe, but also participate in these activities to gain a deeper understanding.

Aspects Observed:

- Student and teacher behavior in sorting waste.
- Existence of facilities and media to support the 3R pattern (such as separate waste bins).
- The influence of teacher teaching on student engagement in the 3R program.
- Social interaction between students and teachers in supporting waste management programs.

c. Questionnaire

Questionnaires were used to obtain quantitative data about the knowledge, attitudes, and involvement of students and teachers in the 3R program. This questionnaire measures how much influence the 3R pattern has on their behavior and understanding.

d. Documentation Study

Documentation studies involve collecting data from various relevant documents, such as school waste management policies, guidelines on the 3R pattern, waste-related activity reports, and teaching materials used by teachers to educate students.

2. Data collection technique

a. Interview

This technique is carried out by means of face-to-face interviews or via an online platform, depending on participant availability. Interviews were conducted with students, teachers and staff to obtain their views regarding the theory of social behavior and waste management using the 3R pattern.

b. Observation

Participatory observation techniques are carried out by researchers directly observing waste management activities in schools, either through direct observation in the field or through observation of planned activities. This observation serves to see how social behavior theory plays a role in waste management in schools.

c. Questionnaire Distribution

Questionnaires were distributed directly to students and teachers to obtain quantitative data regarding their attitudes and involvement in waste management using the 3R pattern. This questionnaire can be distributed in physical or digital form.

d. Document Analysis

Researchers analyzed various documents related to 3R waste management in schools. This technique involves reading and interpreting official documents related to school policies, activity reports, and teaching materials.

4. RESULT

4.1 3R Pattern Waste Management through a Perspective Review of Social Behavior Theory and Functional Structure at SMPN 1 Jenggawah

Based on social behavior theory, the implementation of the 3R pattern at SMPN 1 Jenggawah is heavily influenced by the social norms that exist at school. Social behavior driven by interactions between students, teachers and school staff creates an atmosphere that supports the implementation of the 3R pattern. The social learning process carried out through daily activities and school programs has succeeded in changing the mindset of students and teachers regarding the importance of waste management, thereby creating more environmentally friendly habits. Overall, waste management based on the 3R pattern in this school can be seen as a good example of applying social behavior theory, where social norms and social learning play a key role in the success of the program.

The social norms formed at SMPN 1 Jenggawah support pro-environmental behavior. The school creates a culture of cleanliness that prioritizes the habit of throwing rubbish in its place and sorting waste. Social pressure within the school community also plays a large role in encouraging students to follow these norms.

Based on data collection through interviews, observation and documentation, several important findings were found which can be explained as follows:

1. Implementation of the 3R Pattern in Schools [7]:

- **Reduce:** Most students and staff understand the importance of reducing waste, especially when it comes to the use of single-use plastics and non-recyclable items. Some students reduce the use of plastic bottles by bringing their own drinking bottles.
- **Reuse:** Students engage in simple recycling activities, such as using waste paper to create works of art or other functional items. Teachers also use used materials for learning activities.
- **Recycle :** The school has separate bins for organic, inorganic and recyclable waste. However, the recycling process in schools is still limited to sorting and does not include further waste processing.

2. The Role of School Components in Waste Management:

- **Students:** Students play an active role in sorting waste in the classroom and school area. However, there are some students who are still not consistent in implementing the 3R pattern.
- **Teacher:** Teachers act as agents of change by providing education about the importance of waste management through lessons and activities outside the classroom. Teachers are also examples for students in implementing the 3R pattern.
- **School Staff:** School staff are responsible for providing facilities such as separate rubbish bins and maintaining school cleanliness. Staff also supports the organization of programs related to waste management.

3. Emerging Social Norms:

There are social norms that have developed at SMPN 1 Jenggawah which encourage students to maintain cleanliness and manage waste properly. Social pressure at school is quite strong, and students who do not participate in waste sorting feel embarrassed or reprimanded by their peers.

4. Facilities and Infrastructure:

The school has provided adequate facilities, such as separate bins for organic, inorganic and recyclable waste. However, there are still some shortcomings in terms of further waste management and more sophisticated waste processing facilities.

Based on functional structure theory, each component in a school has a clear function and supports each other. Teachers play a role in educating and providing examples of waste management. Students have an important role in implementing the 3R pattern, while school staff support by providing the necessary facilities.

Every part of the school, including students, teachers and staff, works together to create an effective waste management system. The social system at this school runs well when each element carries out its function optimally. However, there are

several challenges in consistently implementing the 3R pattern, which shows that the balance of the system is sometimes disturbed if one part does not carry out its role well.

Clear school policies on waste management and norms that support waste management create a stable social structure. This policy helps create uniform behavior among students and staff, which supports the achievement of waste management goals.

Even though there is high awareness among students and staff, the biggest challenge faced is consistency in implementing the 3R pattern, especially among a small number of students who are less aware or less motivated to separate waste consistently.

These findings can be analyzed using Schutz's phenomenology, that interactions between individuals create a shared understanding which is influenced by each other's subjective experiences [8]. Customers often take advantage of female workers' vulnerable positions, reflecting unequal power dynamics. Phenomenology helps reveal how female workers interpret this relationship and their strategies for surviving these conditions.

Based on the results and discussion previously presented, an analysis of the implementation of the 3R pattern (Reduce, Reuse, Recycle) at SMPN 1 Jenggawah through the perspective of social behavior theory and functional structure can be carried out by paying attention to several key dimensions: individual behavior, the function of the school's social system, and supporting norms and structures.

1. Analysis Based on Social Behavior Theory

a. Social Learning and the Role of Teachers in Shaping Behavior. The application of the 3R pattern is strongly influenced by social learning theory, which emphasizes the importance of observation and imitation in shaping behavior. Teachers, as agents of change, have a very significant role in transferring knowledge about waste management. Students' behavior is largely influenced by direct examples provided by their teachers and peers.

- **Analysis:** The success of the 3R pattern at SMPN 1 Jenggawah in the social learning aspect indicates that if waste management behavior is instilled in an interesting and practical way, students are more likely to adopt it. Therefore, sustainable, participatory and experience-based teaching has the potential to increase student involvement in waste management.

b. Social Norms as a Controlling Factor Social. Norms at SMPN 1 Jenggawah play a role in creating social pressure that encourages students to comply with waste sorting and management rules. This norm is reinforced by a group of peers who monitor and provide a positive influence on the behavior of their friends.

- **Analysis:** The power of social norms in encouraging pro-environmental behavior shows that the implementation of waste management policies or norms is not only effective if instilled by the school, but also if it involves interaction between individuals in the environment. With

supportive social norms, such as feelings of embarrassment or embarrassment if you do not follow waste sorting habits, students are more encouraged to participate actively.

c. Student Participation in 3R Programs Involving students in waste management programs such as recycling projects or cleanliness campaigns increases their sense of ownership of school cleanliness.

- **Analysis:** Social behavior theory suggests that active participation creates a greater sense of responsibility, which has the potential to change behavior to be more sustainable. Students' active participation in environmentally based projects strengthens their identification with the values of cleanliness and good waste management.

2. Analysis Based on Functional Structure Theory

a. Interrelationship of School Components in Waste

Management Functional structure theory underlines the importance of balance and function of each element in the school's social system. In this case, each component (students, teachers, staff) has a certain role that is interconnected in supporting the success of waste management using the 3R pattern. The success of waste management can be seen from how each component of the system (for example, teachers who educate, students who practice, staff who provide facilities) supports each other and functions optimally.

- **Analysis:** According to the perspective of functional structure theory, if one part of the system does not function according to its role, such as if students do not follow waste sorting procedures or if facilities are inadequate, then the overall goal of the system (i.e., effective waste management) will be compromised. This shows that the success of waste management does not only depend on one party, but on structured collaboration between teachers, students and school staff.

b. The Role of School Policies in Creating Social

Structure Schools as educational institutions have a large role in establishing policies and norms that regulate student behavior. A clear and consistent waste management policy functions as a structural instrument that creates order in waste management, which in turn shapes certain behavioral patterns in the school's social system.

- **Analysis:** Based on functional structure theory, school policies that contain clear rules regarding waste management show that a strong social structure is very important for the successful implementation of the 3R pattern. Without clear policies or regulations, successful waste management will be difficult to achieve because there is no basis that directs individual and group behavior in schools.

c. Limitations in Social Systems and Facilities Even though SMPN 1 Jenggawah has facilities to

support waste management (such as separate waste bins), the limited facilities for further processing of waste is a challenge in itself. This shows that the school system needs to be adapted to evolving needs.

- **Analysis:** Referring to functional structure theory, imbalances in waste management infrastructure and facilities can affect the functioning of the school's social system. If facilities for recycling waste are inadequate or not well managed, the goals of effective waste management will be disrupted. Therefore, it is necessary to pay attention to providing better facilities and further waste processing so that the waste management system in schools can run more optimally.

3. Challenges Faced

Although there have been significant efforts in implementing the 3R pattern, challenges remain, such as:

- **Consistency in Implementation:** Some students are inconsistent in sorting waste due to lack of supervision or uneven awareness among students.
- **Limited Recycling Facilities:** Schools still lack facilities for more complex and large-scale waste processing.
- **Awareness and Continuous Education:** Although most students have been involved in 3R activities, efforts to keep education about waste management sustainable need to be increased.

5. Conclusion

Research on waste management using the 3R (Reduce, Reuse, Recycle) pattern at SMPN 1 Jenggawah, which is reviewed from the perspective of social behavior theory and functional structure, shows that the implementation of the 3R pattern in this school is quite effective, although there are still challenges in consistency of implementation and limited facilities. who supports. Penerapan Pola 3R di SMPN 1 Jenggawah:

1. The implementation of the 3R principles in this school is carried out through reducing waste, reusing used goods and recycling. Students and school staff play an active role in this activity by sorting waste at school, although some challenges in consistent implementation still exist, especially among some students.
2. **The Role of Social Behavior Theory:** Social behavior theory shows that students' behavior in waste management is influenced by social learning from their teachers and peers. The social norms that develop in schools also play an important role in encouraging students to comply with waste management rules. Social pressure and motivation to gain social recognition from peers increase students' awareness and participation in the 3R program.

3. **The Role of Functional Structure Theory:** Based on functional structure theory, the success of waste management at SMPN 1 Jenggawah is very dependent on the function of each component of the school's social system, such as students, teachers and staff. Each part of the system has a role that supports each other. Clear school policies regarding waste management and adequate facilities also play a role in creating order and smooth implementation of the 3R pattern.
4. **Challenges Faced:** Despite significant efforts, the main challenge faced is consistency in implementing the 3R pattern, especially related to the behavior of several students who have not been completely consistent in sorting waste. In addition, existing facilities are still limited in terms of further waste processing, which affects the effectiveness of the program.
5. **Recommendation:** To increase the success of waste management using the 3R pattern at SMPN 1 Jenggawah, it is recommended to improve waste processing facilities, continue sustainable education programs, and strengthen student involvement through more interactive and fun activities. Increased supervision and consistency in implementing the 3R pattern also needs to be considered to ensure that all students are actively involved.

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