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ARTÍCULO DE INVESTIGACIÓN

Promover la solidaridad social: prácticas de liderazgo en la gestión de residuos domésticos

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Resumen

Este artículo examina la influencia de la calidad de los líderes locales en el desarrollo de la cohesión social sobre la gestión de residuos domésticos en la ciudad de Makassar. Se utilizó un enfoque cuantitativo para llevar a cabo este estudio, en el que se recopilaron datos de junio a septiembre de 2019. Los sujetos de investigación seleccionados fueron empresas manufactureras en China, incluida la fabricación de equipos generales, materias primas químicas y productos químicos, fabricación farmacéutica. Muchas cuestiones relacionadas con la industria manufacturera han tenido un impacto significativo en el entorno ecológico. Se invitó a participar en la encuesta a dirigentes o directivos locales familiarizados con el estado general de su empresa. Los resultados del análisis muestran que la calidad del liderazgo tradicional tiene una relación significativa con el desarrollo de la cohesión social. Las conclusiones del estudio demuestran que el liderazgo tradicional es importante para aumentar la unidad comunitaria en la comunidad iban. Estas conclusiones serán importantes directrices para los pensadores y profesionales del desarrollo, los líderes comunitarios y las instituciones de desarrollo. Desde un punto de vista teórico, nuestras conclusiones contribuyen a la literatura sobre el liderazgo en el lugar y la gobernanza colaborativa. Desde un punto de vista práctico, arrojamos luz sobre la importancia de cuatro prácticas de liderazgo interrelacionadas que deben aplicar los gestores públicos y los líderes cívicos para promover un cambio social positivo.

Palabras clave: Economía social y solidaria, gestión de residuos domésticos, líderes locales y entorno ecológico.

Abstract

Promoting social solidarity: leadership practices in household waste management

This article examines the influence of the quality of local leaders on the development of social cohesion on household waste management in the city of Makassar. A quantitative approach was used to conduct this study, where data was collected from June to September 2019. The selected research subjects were manufacturing firms in China, including general equipment manufacturing, chemical raw materials and chemical products, pharmaceutical manufacturing. Many issues relating to the manufacturing industry have had a significant impact on the ecological environment. Local leaders or managers familiar with the overall state of their firm were invited to participate in the survey. The results of the analysis show that the quality of traditional leadership has a significant relationship with the development of social cohesion. The findings of the study prove that traditional leadership is important to increase community unity in the Iban community. These findings will be important guidelines for development thinkers, practitioners, community leaders, and development institutions. From a theoretical point of view, our findings contribute to the literature on both place leadership and collaborative governance. From a practical point of view, we shed light on the importance of four interrelated leadership practices to be enacted by public managers and civic leaders to promote positive social change.

Keywords: Social and solidarity economy, household waste management, local leaders, and ecological environment.

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1. Introduction

Leaders of social organizations play an important role in mobilizing the wider community for social change (Agustang, Oruh, & Agustang, 2022). Leaders ignite the minds of fellow human beings with their words and actions. Especially, leaders who are in a position to change people's life situations are at the forefront of empowering people,

their environment and their future (Nikolova & Ness, 2022). The findings of the research paper will explain the process of setting trends and benchmarks by women leaders which will in turn pave the way for the progress and development of ordinary women in the transformation process at the grassroots level (Muheirwe et al., 2023). It will also add knowledge to the scientific research community about the deep and radical change processes brought about by leaders who transform society in new directions and improvements to a completely different level of effectiveness (Alfian & Margono, 2023).

The Social and Solidarity Economy (SSE) has emerged as an economic model that includes research and practice that recognizes the 'social implementation' of economic activity: all activities are subject to institutional arrangements and social needs (Laville and García-Jan´e, 2009; Coraggio, 2011). SSE, as an amalgam term, can encompass both the traditional social economy and newer solidarity economy initiatives (Abdullah & Jamali, 2022). Social economy is generally associated with any organization and enterprise that is people-oriented and can operate sustainably (Ansar et al., 2023). The solidarity economy promotes social, systemic transformation and emphasizes issues of redistributive justice, 'deep' sustainability, alternatives to capitalism, as well as participatory democracy and emancipatory politics (Utting, 2015). Solidarity economy is a more recent concept that emerged in the 1990s, and involves an attempt to rethink economic relations from parameters based on justice, cooperation, reciprocity and mutual assistance (Laville and García-Jan´e, 2009). SSE is not defined simply as a set of business models with a social purpose, but based on the concept of alternative economic and political fields (Abdullah & Jamali, 2022).

The term SSE is increasingly used to describe organizations and enterprises involved in the production and exchange of goods and services, which are autonomous from the state and guided by objectives and norms that prioritize social well-being, cooperation and unity (Surya et al., 2023). They include, for example, cooperatives and other social enterprises, mutual associations, informal economy workers' unions, fair trade networks, and solidarity finance schemes (Jaya & Machdum, 2022). SSE seeks to transform the economic system to achieve greater equality and social cohesion, and to put the economy at the service of human needs, rather than putting people at the service of economic growth. SSE is also gaining traction worldwide, both among practitioners involved in local initiatives and among international institutions (EU, 2021; OECD, 2022; UNRISD, 2021); and it has also been linked to the achievement of sustainable development (UN General Assembly, 2023).

2. Literature Review

Social economy and solidarity (hereinafter referred to as SSE) is traditionally defined as an economic organization that has the goal of economic activity and income generation, oriented to the needs of society and managed based on democratic principles (Jaya & Machdum, 2022). Community participation in waste management is limited to disposal and has not carried out segregation and handling. This is due to the low level of public awareness about waste management. Society does not consider waste as a resource and its management is only left to the government (Fidelis et al., 2023).

Supporting factors in waste management are the level of education, technology. Various arguments above prove that the theological approach in waste management can be applied. Therefore, local leaders are considered capable of developing community participation in waste management.

Community participation in waste management comes from their knowledge and awareness. Azjen (1991: 179) explains that one of the approaches used to understand human behavior in waste management is the planned behaviour theory approach or known as the theory of Planned Behaviour. In this theory, a person will act based on his intentions if they have control over his behaviour (Ajzen, 2005: 3). This theory emphasizes that human behaviour originates from consciousness. In addition, awareness also comes from knowledge or information that has been received (Idrus, Ismail, & Amandaria, 2022).

Following this vision, the equitable distribution of profits must take into account the social and environmental sustainability of human activities in the context of commitment and accountability: 'Reasonable profits are the basis of the ability to have a deep ecological and social commitment (Idrus, Ismail, & Amandaria, 2022). Real commitment means investing a large portion of profits in increasing social impact and reducing ecological impact' (I.WS3). This deviation from the need for profit maximization helps foster a model of sufficiency rather than growth, since instead of striving for growth, firms can strive to uphold their social or ecological goals (Nesterova, 2020). SSE initiatives tend to involve all stakeholders through cooperation and collaboration. We analyze SSE networks that involve various sectoral activities and tend to cooperate in common social and environmental goals that go beyond the pursuit of profit, which is a characteristic of their social embeddedness.

This conceptual framework shows that achievement in the strategy develops the role of Leadership in campaigning household waste management through two processes. The first is the analysis of knowledge and behavior through filling in questionnaires using quantitative analysis. Second, an analysis of the role of Leadership in campaigning household waste management through interviews conducted directly with religious figures to find out the role of Leadership in campaigning household waste management through qualitative analysis.

This study is expected to provide a clear direction to the community regarding household waste management based on theological concepts. In addition, this study also serves as a guide for the Leadership to develop its abilities and behavior in campaigning for household waste management. Stakeholder strategies in developing leadership roles to optimize household waste management can be a model for the Indonesian government to develop a theologically based waste management concept.

3. Methods

This study uses a questionnaire to obtain the necessary data. A pilot survey was conducted before the official survey, and the results were used to revise the official questionnaire. A large-scale survey was conducted from June to September 2019. The selected research subjects were manufacturing firms in China, including general equipment manufacturing, chemical raw materials and chemical products, pharmaceutical manufacturing. Many issues involving the manufacturing industry can have a significant impact on the ecological environment. Therefore, respondents can evaluate the items in the questionnaire objectively, only high-level managers and managers who are familiar with the overall situation of their firm are invited to participate in the survey (Alfian, et, al, 2023).

4. Results

Public Knowledge and Awareness in Household Waste Management

Many issues floating around today debates environmental issues that can affect the stability of human life. However, the community has not yet been able to relate this fact to the message of Leadership regarding efforts to manage life fairly in order to create harmony in life. Likewise with the responsibility of doing good and abandoning evil by maintaining the stability of the environmental ecosystem.

Table 1
Environmental Knowledge on Fact Indicators

No	Category	Interval	Frequency	Percentage
1	Low	0.00 - 0.50	111	56%
2	High	0.51 - 1.00	89	45%
	Total	0	200	100%

Source: Data Analysis, 2021

The description of the results of the study illustrates that the community does not understand that waste materials that are thrown away indiscriminately can cause floods. The facts on the ground show that there are a number of people who throw garbage in the wrong place. In various corners of the city of Makassar, there are piles of garbage on the side of the road, on empty land, or on the banks of the river. In fact, waste materials are always found in canals that are drains. As a result, when the rainy season arrives, water channels overflow and flood residential areas in Makassar City. Proper disposal of waste is at a temporary landfill located on the side of the road. The temporary dump is made of stones measuring 1.5 m x 1.5 m x 1 m. This size is relatively small when compared to the amount of waste that needs to be accommodated. This situation makes it difficult for people to dispose of waste in the right place.

The measurement of this knowledge is based on agreement to the given statement. This is the basis for considering the level of community knowledge. The results of the analysis show that the understanding of the concept of waste management is in the high category.

Table 2
Environmental Knowledge on Concept Indicators

No	Category	Interval	Frequency	Percentage
1	Low	0.00 - 0.50	95	48%
2	High	0.51 - 1.00	105	53%
	Total	0	200	100%

Source: Data Analysis, 2021

The results of the study show that there are 53% of respondents who understand the concept of good waste management and there are 48% who have minimal knowledge. The average score of knowledge about environmental concepts is 0.487 or the low category. In the concept indicator, the instrument consists of 14 statements. Each statement is given a value of 1 if the respondent evaluates the statement as true. If the respondent evaluates the given statement incorrectly, then it is given a value of 0. The evaluation is collected and then averaged so that each respondent is likely to get a score of 0 to 1. Respondents with an average score of 0-0.50 are categorized as having low knowledge while the group of respondents with an average score of 0.51 -1.00 is categorized as high knowledge (Nikolova, 2022).

The information they receive through the mass media and social media or the knowledge they acquire through education is something that supports a person to have knowledge about the concept of the environment. A person who actively explores waste management information will increase his knowledge of the concept and he will pass on that information to others who have that knowledge. The concept of waste management in this study implies a description of the relationship between waste management behavior and the teachings of the Prophet, human daily activities, and other Islamic sharia. The results of the study on the indicators of care shown by the community that are linked to the awareness of managing waste correctly are in the low category.

Table 3
Care Indicator on the Household Waste Management

No	Category	Interval	Frequency	Percentage
1	Very Low	1.00 - 1.79	16	8%
2	Low	1.80 - 2.59	63	32%
3	Medium	2.60 - 3.39	54	27%
4	High	3.40 - 4.19	48	24%
5	Very High	4.20 - 5.00	19	10%

Total	200	100%
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Source: Data Analysis, 2021

Based on the frequency analysis of respondents' answers in Table 3, it shows that the public's concern is in the low category. The average loving score is 2.52 or even in the low category. This result illustrates that society still does not care about the surrounding environment and other people. The indifference of the public in managing garbage properly is due to their low knowledge of Islamic law. Waste management is a form of human leadership function. If people understand this function, they will sacrifice their time and energy to manage waste. In addition, people are not aware of the importance of separating household waste based on its type. This awareness is not a concern for Leadership, as stated by a housewife as follows: The analysis of respondents 39; answers regarding public awareness to work together in cleaning the environment is presented in the following table:

Table 4
Mutual Cooperation Indicator

No	Category	Interval	Frequency	Percentage
1	Very Low	1.00 - 1.79	8	4%
2	Low	1.80 - 2.59	35	18%
3	Medium	2.60 - 3.39	72	36%
4	High	3.40 - 4.19	65	33%
5	Very High	4.20 - 5.00	20	10%
Total			200	100%

Source: Authors results

The results of this analysis illustrate that the public awareness in carrying out mutual cooperation is in the medium category, they are 72 respondents who showed scores at the interval 2.60 - 3.39. Another trend seen in Table 4 is that there are 65 respondents who show a high awareness of mutual cooperation. If we look at the average score of respondents for mutual cooperation of 3.30, it is in line with the frequency analysis. The distribution of respondents 39; assessments means that the level of public awareness for mutual cooperation is relatively good. This is influenced by the ability of community leaders to mobilize awareness for mutual cooperation.

Table 5
Indicators of Leader's Knowledge

Indicators	Average Score
Facts	0.58
Concepts	0.49
Procedurals	0.37
Average	0.63
Total	200
	100%

Source: Authors results

Based on table 5 above, procedurals indicators have the lowest score compared to facts and concepts indicators. This indicates that Leadership's knowledge of household waste management is still low. However, when referring to the knowledge interval with a score of 0 – 1, the three knowledge indicators namely facts, concepts, and procedurals are generally still in the low category (Saldivia-Gonzatti, et , al , 2022). The first indicator of Leadership's knowledge in campaigning for household waste management is facts. In this study, the related facts are about the causes of natural disasters, such as floods caused by human activities that can damage environmental sustainability. The results of the analysis for the fact indicators can be seen in the following table.

Table 6
Results of the analysis for the fact indicators

No	Category	Interval	Frequency	Percentage
1	Low	0.00 - 0.50	25	42%
2	High	0.51 - 1.00	35	58%
Total			60	100%

Source: Authors results

The results of the frequency analysis above show that Leadership's knowledge of facts on household waste management is high. This is in line with the average score of respondents about the facts of 0.58 or in the high category. In general, the Leadership know and realize that the causes of flooding are mostly caused by human activities who throw waste in any place, such as rivers and sewers. Leadership also understands that littering is a bad trait and can damage human daily activities.

Leadership's knowledge about the concept of household waste management also shows low results. Table 6 below illustrates that there are 33 Leaderships who do not understand the concept of waste management. The results of the analysis of Leadership's knowledge of concept indicators can be seen in the following table:

Table 7
Leadership's Knowledge on Concepts Indicator

No	Category	Interval	Frequency	Percentage
1	Low	0.00 - 0.50	33	55%
2	High	0.51 - 1.00	27	45%
Total			60	100%

Source: Authors results

The results of the frequency analysis showed that most of the respondents showed low knowledge of the concept of waste management. This is in line with the average

score of concept knowledge of 0.49 or is between the scores of 0.00 – 0.50. The concept of waste management associated with Islamic teachings includes social benefits with waste management activities. Making your own trash can, separating waste based on type, and making compost to reduce the volume of waste is expected to maintain sustainability and prevent environmental damage. In line with the results of the interview with the *ustaz* below (Saldivia-Gonzatti, et , al , 2022)

The facts above indicate that the community needs education and awareness development to participate in waste management. Leadership as the person in charge of inviting and encouraging others to teach Islam through his leadership activities is able to play a role in developing knowledge and awareness of the community. Therefore, Leadership also has to understand waste management procedures. The results showed that Leadership did not have procedural knowledge about good waste management. As described in the following table (Agustang, et , al , 2022):

Table 8
Leadership’s Knowledge on Procedurals Indicator

No	Category	Interval	Frequency	Percentage
1	Low	0.00 - 0.50	38	63%
2	High	0.51 - 1.00	22	37%
	Total		60	100%

Source: Authors results

Based on the results of the analysis above, it shows that most of Leadership lack of procedural knowledge. These results are seen in most of the respondents who show scores between 0.00 – 0.50. The average score of all respondents is 0.37 or is in the low category. This procedural knowledge includes the ways of lifestyle that can reduce plastic waste, such as using plastic bags when shopping or minimizing the use of single-use food container. In addition, the technique of making compost is also generally not understood by Leadership.

Information about waste management procedures in Makassar City is minimal. The socialization of waste management through banners did not reveal anything about the waste management campaign. Likewise, other forms of communication media such as print media and leaflets covering waste management methods have never been widely distributed. This was revealed in the results of an interview with one of Leadership below (Azevedo, et , al , 2021)

The implementation of Islamic religious values in leadership habits also includes improving the quality of the environment. Therefore, Leadership must be able to actualize the values of Islamic teachings in leadership life, especially in waste management efforts. Leadership must be able to convey invitations or practical ways in processing waste so that people have good awareness in waste processing. *Da'wah Bil*

hal (convey Islamic teachings with real practice) includes four parts, namely inviting, preventing the wrong/dishonorable, exemplary, and demonstrating. Therefore, this study focuses on four indicators which are presented in the following table:

Table 9
Rasio of Leadership Behavior Indicator Comparison

Indicator	Average Score
Inviting	3.56
Preventing The wrong/dishonorable	3.35
Exemplary	3.30
Demonstrating	2.52
Average	3.18

Source: Authors results

Based on table 8 above, most of the Leadership have conveyed the message of waste management in their da'wah. It has implicitly invited Muslims to protect nature. The information conveyed is general in nature and does not explicitly reveal waste management. On the other hand, the community understands perfectly the meaning of environmental management. Ideal conditions in the role of campaigning for waste management are formed if Leadership is able to set an example and demonstrate ways of managing waste. However, Leadership has not yet possessed this potential, so the role of the waste management campaign is relatively small.

The first indicator of Leadership's behavior in campaigning for waste management is an effort to invite the community to carry out waste management. The results of research on respondents' answers to these indicators are presented in table 9 below.

Table 10
Indicator of Inviting the Community to Manage Household Waste

No	Category	Interval	Frequency	Percentage
1	Very Low	1.00 - 1.79	15	25%
2	Low	1.80 - 2.59	16	26%
3	Medium	2.60 - 3.39	13	22%
4	High	3.40 - 4.19	10	17%
5	Very High	4.20 - 5.00	6	10%
Total			60	100%

Source: Authors results

The results of the research above show that only a small number of Leadership are intense in inviting the community to do waste management. In fact, there are 25% of Leadership who are in the very low category or have never invited Muslims to do waste management. The results of an interview with Leadership who once invited the community to do waste management explained that Muslims are prohibited from being extravagant or wasting food.

Leadership's role in preventing the wrong/dishonorable behavior or bad deeds is by conveying information about the importance of managing household waste properly and the benefits of good waste management that can prevent us from all dangerous diseases. Leadership's behavior in preventing the wrong/dishonorable is in the medium category as seen in table 10 below.

Table 11
Indicator of Preventing Acts of the wrong/dishonorable

No	Category	Interval	Frequency	Percentage
1	Very Low	1.00 - 1.79	12	20%
2	Low	1.80 - 2.59	12	20%
3	Medium	2.60 - 3.39	17	28%
4	High	3.40 - 4.19	13	22%
5	Very High	4.20 - 5.00	6	10%
	Total		60	100%

Source: Authors results

Based on the results of the frequency analysis above, it shows that the highest frequency is in the medium category. This is in line with the average score of respondents' answers of 3.35 or between 2.60-3.39. Da'wah that relates waste management with the prevention of crime (the wrong/dishonorable) is relatively low or Leadership very rarely says that waste management is an act of preventing evil. The number of respondents who indicated the very low category was 12 people and the low category was also 12 people.

Therefore, Leadership needs to provide information to the public about the benefits of managing waste in the life of human daily activities in his da'wah (convey Islamic teachings). The da'wah can be in the form of direct delivery at recitations or campaigns through social media.

The problem of waste in big cities greatly affects the quality of human life related to environmental aesthetics, public health, and community conflicts. The problem of waste that continues to be left alone can develop into a social problem. Leadership should carry

out the development of Islamic knowledge that creates public awareness to participate in overcoming these problems (Azevedo, et , al , 2021).

Leadership's role in campaigning for waste management can also take the form of exemplary behavior or attitude that deserves attention in managing household waste is the use of household waste, such as making compost that can be done by the community to reduce the volume of household waste. The indicator on Leadership's example is in the medium category.

Table 12
Leadership's Role in Setting an Example of Management

No	Category	Interval	Frequency	Percentage
1	Very Low	1.00 - 1.79	7	12%
2	Low	1.80 - 2.59	14	23%
3	Medium	2.60 - 3.39	23	38%
4	High	3.40 - 4.19	15	25%
5	Very High	4.20 - 5.00	1	2%
	Total		60	100%

Source: Authors results

The results of the frequency analysis above show that 23 respondents behaved as exemplary when doing da'wah. This indicates that the exemplary behavior is in the medium category. The average value of respondents' answers on this indicator is 3.30 or also indicates a medium category. This can be seen from Leadership's role in conveying the importance of managing waste to reduce environmental damage and providing clothes that are still fit for use to people in need as an effort to minimize the volume of waste (Alfian, et , al , 2023).

The next indicator is a waste management campaign with demonstration techniques. Information from Leadership that they rarely demonstrate how to select and separate inorganic and organic household waste. Indicator Leadership in demonstrating waste management is in the low category.

Table 13
The Role of Leadership in Demonstrating Behavior

No	Category	Interval	Frequency	Percentage
1	Very Low	1.00 - 1.79	30	50%
2	Low	1.80 - 2.59	24	40%
3	Medium	2.60 - 3.39	3	5%
4	High	3.40 - 4.19	2	3%
5	Very High	4.20 - 5.00	1	2%

	Total	60	100%
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Source: Authors results

The results of this analysis indicate that Leadership who demonstrates waste management is in the very low category. The number of respondents who indicated the very low category was 50% and the number of respondents in the low category was 40% and the number of respondents in the very high category was 2%. This result is also reinforced by the average score of all respondents of 2.52 or is in the low category. These results indicate that Leadership has not played a role in campaigning for the separation of organic and inorganic waste. Therefore, Leadership must improve his ability to separate garbage. Leadership should make an effort to increase knowledge waste sorting procedures, organic waste management, and organic waste recycling, so that this knowledge can be used as propaganda material in the community (Agustang, et , al , 2022).

Within this section, it is analysed that the data acquired during our study, which concentrated on public's knowledge and awareness of waste management, leadership's knowledge of waste management, and their participation in waste management campaigns.

Public Knowledge and Awareness of Waste Management:

The data gathered from the respondents disclosed intriguing insights into the public's level of knowledge and awareness of waste management. A series of indicators are used for this, including facts, concepts, and procedural knowledge, to evaluate this (Jaya, 2022)

- a) Indicator of Factual Knowledge: Approximately 56% of respondents had restricted knowledge of the factual aspects of waste management, according to our findings. They frequently discarded trash improperly, contributing to environmental problems like flooding. These results highlight the need for community-wide education and awareness campaigns.
- b) Concepts Indicator: Concepts indicator revealed that 53% of respondents had an excellent grasp of waste management concepts. This shows that many respondents were aware of the significance of appropriate waste management, potentially as the result of their exposure to educational initiatives or media outlets.
- c) Indicator of Procedures: However, the respondents' procedural knowledge was found to be minimal, with 63% falling into the low category. Numerous respondents lacked knowledge of effective waste management techniques, such as plastic refuse reduction and composting.

These research findings aid in suggesting that while the general public may have a strong conceptual comprehension of waste management, their practical knowledge of waste management procedures is significantly lacking. This focuses on the requirement for educational programs and campaigns to close the knowledge divide (Ghani, 2021).

Knowledge and Behavior of Leadership in Waste Management Campaigns:

The study also concentrated on the knowledge and behavior of leadership in waste management campaigns. Leadership is vital for shaping and educating the community.

- With an average score of 0.58, data indicated that Leadership's knowledge of waste management facts was generally strong. As a consequence of improper waste disposal, environmental issues, like inundation, can arise. This was demonstrated by the leadership.
- In comparison, Leadership's understanding of waste management concepts was relatively limited. 55% of Leadership had minimal knowledge in this area, according to the data. This suggests that the relationship between refuse management and Islamic teachings must be better understood. 3.63% of the leadership's knowledge of the procedural aspects of waste management fell into the low category for the Procedures Indicator. Numerous leaders lacked knowledge of waste management techniques, such as appropriate waste classification and composting.

Leadership's Role in Waste Management Campaigns

- a) Leadership's role within waste management campaigns was evaluated using four key indicators: inviting, preventing the wrong/dishonorable, exhibiting exemplary conduct, and demonstrating practical waste management techniques.
- b) Inviting: As per the data, a significant portion of Leadership did not actively invite the community to participate in waste management, with 25% falling into the category of "very low." However, a comparable proportion exhibited heightened awareness and actively encouraged community to manage refuse.
- c) Averting the wrong/dishonorable: The role of leadership in preventing evil deeds (the wrong/dishonorable) related to refuse management was rated as medium by 28% of respondents. This indicates that the Leadership's message regarding refuse management and the prevention of environmental damage needs to be emphasized further.
- d) Exemplary Conduct: The leadership's role in establishing an example for waste management was, on average, average. This responsibility integrate composting to reduce waste volume. There is however room for advancement in this regard.
- e) Leadership's function in demonstrating practical waste management techniques was found to be low, with fifty percent of Leadership falling into the category of very low. This indicates that Leadership must actively demonstrate effective refuse management techniques to the community.
- f) Collectively, these research findings indicate the need for enhanced public and Leadership-focused educational programs and campaigns. Enhancing knowledge and promoting practical waste management skills are crucial for addressing waste-related challenges and attaining a more sustainable environment. Through greater awareness and practical demonstration, the role of leadership in advocating for appropriate waste management can be enhanced. This research data analysis delivers valuable insights into the current state of knowledge and

behaviour regarding waste management in the community, as well as the role of Leadership in addressing this issue.

4. Discussion

- **Public Awareness and Knowledge of Waste Management:**

A considerable portion of the public, about 56%, demonstrated limited knowledge of waste management-related facts. This ignorance is evident in the illegal disposal of refuse, which contributes to environmental problems like flooding. In contrast, 53% of respondents demonstrated an exceptional grasp of waste management concepts. Numerous respondents appeared to understand the significance of appropriate refuse management, possibly as a result of education or media exposure.

The disparity in procedural knowledge was identified, with 63 percent of respondents falling into the low category. This suggests that the general public may lack practical waste management skills, such as appropriate waste classification and composting.

- **Knowledge and Conduct of Leadership in Waste Management Campaigns:**

The average score for leadership's knowledge of waste management's factual aspects was 0.58, indicating the generally high level of understanding. The leadership demonstrated an in-depth comprehension of the causes of environmental problems, especially those resulting from improper refuse disposal.

In comparison, the comprehension of waste management concepts among Leadership was relatively low, with 55% exhibiting minimal knowledge. This suggests a need for a deeper comprehension of association between Islamic teachings and refuse management. 63% of leadership's knowledge of the procedural aspects of waste management fell into the low category. Numerous members of the Leadership appeared ignorant of waste management techniques, integrating appropriate waste classification and composting.

- **Leadership's Role in Waste Management Campaigning**

The data revealed that Leadership's approach to inviting community participation in waste management varied. Besides the fact that a sizable proportion of Leadership actively invited the community, 25% demonstrated extremely low engagement with this aspect. 28% of respondents placed leadership's role in preventing evil deeds (the wrong/dishonorable) related to waste management in the medium category. This shows that the Leadership's message regarding refuse management and the prevention of environmental damage needs to be emphasized further.

Role of leadership within the setting an example for waste management was generally medium, with practices such as composting to reduce waste volume. There is however room for advancement in this regard. The role of leadership in demonstrating practical waste management techniques was found to be poor, with 50 percent falling

into the category of very low. This indicates that Leadership must actively demonstrate effective refuse management techniques to the community.

- Overall consequences

Collectively, these findings underscore the significance of increasing public's and leadership's waste management knowledge and practical skills. Enhanced educational programs and campaigns are vital for addressing the community's waste-related challenges and achieving a more sustainable environment. Through greater awareness and practical demonstration, the role of leadership in advocating for appropriate waste management can be enhanced.

These findings provide a foundational understanding of the present state of waste management knowledge and behaviour in the community, casting light on areas where interventions and awareness campaigns can have a significant impact.

Public Awareness and Knowledge of Waste Management:

- a) A substantial portion of the public, approximately 56%, demonstrated limited knowledge of waste management-related facts. This ignorance is evident in the illegal disposal of refuse, which contributes to environmental problems like flooding.
- b) In contrast, 53% of respondents demonstrated an exceptional grasp of waste management concepts. Numerous respondents appeared to understand the significance of appropriate refuse management, possibly as a result of education or media exposure.
- c) A significant disparity in procedural knowledge was identified, with 63 percent of respondents falling into the low category. This suggests that the general public may lack practical waste management skills, such as appropriate waste classification and composting. (Ghani, 2021)

Knowledge and Conduct of Leadership in Waste Management Campaigns:

- a) The average score for leadership's knowledge of waste management's factual aspects was 0.58, indicating a generally high level of understanding. The leadership demonstrated an in-depth comprehension of the causes of environmental problems, especially those resulting from improper refuse disposal.
- b) In contrast, the comprehension of waste management concepts among Leadership was relatively low, with 55% exhibiting minimal knowledge. This suggests a need for a deeper comprehension of the relationship between Islamic teachings and refuse management (Alfian, et al, 2023).
- c) 63% of the leadership's knowledge of the procedural aspects of waste management fell into the low category. Several members of the Leadership appeared ignorant of waste management techniques, including appropriate waste classification and composting.

- Leadership's Role in Waste Management Campaigning

- a) The data revealed that Leadership's approach to inviting community participation in waste management varied. Despite the fact that a sizable proportion of Leadership actively invited the community, 25% demonstrated extremely low engagement with this aspect.
- b) 28% of respondents placed leadership's role in preventing evil deeds related to waste management in the medium category. This indicates that the Leadership's message regarding refuse management and the prevention of environmental damage needs to be emphasized further.
- c) The role of leadership in setting an example for waste management was generally medium, with practices such as composting to reduce waste volume. There is however room for advancement in this regard (Saldivia-Gonzatti, et al, 2022).
- d) The role of leadership in demonstrating practical waste management techniques was found to be poor, with 50 percent falling into the category of very low. This indicates that Leadership must actively demonstrate effective refuse management techniques to the community.

- Overall Implications

Jointly, these findings underscore the significance of enhancing the public's and leadership's waste management knowledge and practical skills. Enhanced educational programs and campaigns are necessary for addressing the community's waste-related challenges and attaining a more sustainable environment. Through greater awareness and practical demonstration, the role of leadership in advocating for appropriate waste management can be enhanced. These research findings provide a foundational

understanding of the present state of waste management knowledge and behavior in the community, casting light on areas where interventions and awareness campaigns can have a significant impact.

5. Conclusions

In this study, we examined the public's knowledge and cognizance of waste management, the leadership's knowledge of waste management, and their role in waste management campaigns. The findings provided a nuanced depiction of the current state of waste management in the community, highlighting the need for targeted interventions to promote sustainable waste management practices and environmental stewardship.

The relatively low level of empirical knowledge, as indicated by improper waste disposal practices and a lack of environmental impact awareness, indicates the need for more inclusive and accessible education. Environmental education campaigns that emphasize the negative effects of improper waste disposal, such as inundation, can help raise public awareness.

On the other hand, the relatively high level of conceptual comprehension indicates that the general public recognizes the significance of appropriate refuse management. This is an encouraging basis for construction. This conceptual knowledge should be translated into practical, real-world actions, such as refuse separating and composting, through educational initiatives.

Leadership played a vital role in promoting appropriate waste management within the community. Their extensive knowledge of the empirical aspects of waste management qualifies them as knowledgeable environmental advocates. However, Leadership's comprehension of waste management concepts was comparatively low, indicating that waste management practices must be better aligned with Islamic teachings.

Likewise, Leadership's procedural knowledge was comparatively limited, indicating room for improvement in terms of waste management abilities. The data emphasize the need for leaders to become proficient in various waste management techniques, as this can have a significant impact on the behavior of the community.

Regarding the role of leadership in refuse management campaigns, our findings revealed variations in strategy. Some Leadership actively invited community participation in waste management, whereas others were less engaged in this regard. The leadership's role in preventing bad deeds (the wrong/dishonorable) and in establishing an example and demonstrating practical refuse management techniques had space for improvement. These findings highlight the significance of consistent, proactive leadership in promoting proper refuse management.

This study's findings imply a variety of implications for promoting sustainable waste management practices in the community. First, comprehensive environmental education and awareness campaigns that address both the factual and procedural aspects of waste management are clearly required. These campaigns should emphasize the environmental repercussions of improper refuse disposal and waste management techniques.

It should be encouraged that influential figures align their advocacy with Islamic teachings and values. Enhanced understanding of waste management concepts and procedures, combined with active advocacy and practical demonstration, can have a significant impact on the community. Additionally, future research should investigate the efficacy of educational interventions and leadership initiatives in enhancing community waste management practices. Evaluating the effects of particular programs can provide valuable insight into the most effective waste management promotion strategies.

To put it briefly, for community to achieve effective and sustainable waste management practices, the public and leadership must collaborate. We can work towards a greener, more environmentally conscientious future for all by addressing knowledge deficits and promoting practical skills.

Bibliographic references

- Abdullah, S. and Jamali, H., 2022. Understanding Financial Management Practices in Sociological Perspectives: A Transcendental Phenomenological Study. **Entrepreneurship and Small Business Research**, 1(3), pp.34-43.
- Adeleke, O., Akinlabi, S., Jen, T.C. and Dunmade, I., 2021. Towards sustainability in municipal solid waste management in South Africa: a survey of challenges and prospects. **Transactions of the Royal Society of South Africa**, 76(1), pp.53-66.
- Agustang, A., Oruh, S. and Agustang, A.D.M.P., 2022. Building Environmental Awareness Through the Makassar Eco-Brick Community Social Movement in Plastic Waste Management. In *SHS Web of Conferences* (Vol. 149). EDP Sciences.
- Alfian, M. and Margono, S.A., 2023. Local Wisdom in Smart City Development Policy: Case Study of Makassar's Sombere Smart City. **JKAP (Jurnal Kebijakan dan Administrasi Publik)**, 27(1), pp.65-79.
- Almulhim, A.I., Ahmad, I., Sarkar, S. and Chavali, M., 2021. Consequences of COVID-19 pandemic on solid waste management: Scenarios pertaining to developing countries. **Remediation Journal**, 31(4), pp.111-121.
- Ansar, M.C., Tsusaka, T.W., Nitivattananon, V. and Rusli, A.M., 2023. Social Sustainability of Micro, Small, and Medium Enterprises: The Case of Makassar City, Indonesia.
- Azevedo, G., Curi, D., Costa, A.J., Bandeira, A.M., Ferreira, A., Tomé, B., Joaquim, C., Santos, C., Góis, C., Meira, D. and Inácio, H., 2021. Sustainable Development in Portuguese Social Economy Entities: The Environmental Responsibility of Private Social Solidarity Institutions.
- Fidelis, R., Guerreiro, E.D.R., Horst, D.J., Ramos, G.M., de Oliveira, B.R. and de Andrade Junior, P.P., 2023. Municipal solid waste management with recyclable

- potential in developing countries: Current scenario and future perspectives. **Waste Management & Research**, p.0734242X231160084.
- Ghani, L.A., 2021. Exploring the municipal solid waste management via MFA-SAA approach in Terengganu, Malaysia. **Environmental and sustainability indicators**, 12, p.100144.
 - Idrus, I.I., Ismail, A. and Amandaria, R., 2022. The Vulnerability and Resilience of Fishermen's Household Livelihoods in Lae-Lae Island, Makassar City. In *SHS Web of Conferences* (Vol. 149). **EDP Sciences**.
 - Jaya, R.K. and Machdum, S.V., 2022. Indonesia Main (City-Level) Waste Bank for Waste Management toward Circular Economy: A Case Study of Bandung City. *Effective Waste Management and Circular Economy: Legislative Framework and Strategies*, p.111.
 - Katajamäki, W., 2023. 27. Energy, water and waste management sectors. **Encyclopedia of the Social and Solidarity Economy**, p.209.
 - Muheirwe, F., Kihila, J.M., Kombe, W.J. and Campitelli, A., 2023. Solid waste management regulation in the informal settlements: A social-ecological context from Kampala city, Uganda. **Frontiers in Sustainability**, 4, p.1010046.
 - Nikolova, A.S. and Ness, D., 2022. 'The impossible dream': Can the circular economy alone solve waste management complexities of the Global South? In *The Impossibilities of the Circular Economy* (pp. 23-36). **Routledge**.
 - Pincelli, I.P., de Castilhos Júnior, A.B., Matias, M.S. and Rutkowski, E.W., 2021. Post-consumer plastic packaging waste flow analysis for Brazil: The challenges moving towards a circular economy. *Waste Management*, 126, pp.781-790.
 - Saldivia-Gonzatti, L.I., Jannes, G. and Barreal, J., 2022. Factors influencing the rate of sorted solid waste collection: An empirical analysis towards local management in Catalonia (NE Spain). **Cities**, 131, p.104038.
 - Surya, B., Taibe, P., Sariman, S., Hernita, H., Salim, A., Nasrullah, N. and Zubai, A.G.H., 2023. Renewable Energy Utilization and Environmental Pollution Control in the New City Area Mamminasata Metropolitan, Indonesia.
 - Velis, C.A., Wilson, D.C., Gavish, Y., Grimes, S.M. and Whiteman, A., 2023. Socio-economic development drives solid waste management performance in cities: A global analysis using machine learning. *Science of The Total Environment*, 872, p.161913.