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PROMOTING COMMUNITY PRACTICES IN WATER SANITATION THROUGH SOCIAL MEDIA CAMPAIGN

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ABSTRACT

This research investigated the efficacy of a social media advocacy campaign in promoting positive community practices related to water sanitation among active Facebook users in Batangas City, Batangas, Philippines. Employing a descriptive quantitative research design, the study utilized a structured questionnaire with a four-point Likert scale to assess community awareness, evaluate the campaign's content, clarity, and accuracy, and determine its overall effectiveness.

Findings revealed that respondents possessed a high baseline level of awareness regarding essential and sanitation practices and perceived the campaign as highly successful in delivering clear, accurate, and relevant content The campaign was effective in motivating behavioral change particularly in household sanitation such as safer waste disposal. However, the lowest-rated indicators highlighted a significant knowledge-behavior gap, showing content was least effective at encouraging responsible water habits and transforming viewers into active advocates who share information. Despite high success, participation was hindered by reported technical quality issues and limited internet access.

The study concludes that social media is a powerful tool for enhancing awareness and motivating individual behavior, but future campaigns must prioritize engaging and interactive

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content to strengthen motivational cues and bridge the gap between knowledge and sustained community action.

Keywords: *social media, behavior, awareness, campaign, sanitation, safe water disposal, internet access*

INTRODUCTION

Access to clean and safe water, adequate sanitation and proper hygiene practices (collectively known as WASH) are fundamental to human health, dignity, and sustainable development. The World Health Organization (WHO) notes that safe and sufficient WASH services play a key role in preventing numerous neglected tropical diseases and reducing diarrheal mortality. (World Health Organization, 2025) The Centers for Disease Control and Prevention similarly emphasizes that reliable access to safe water and sanitation significantly reduces the global burden of disease. (U.S. Centers for Disease Control and Prevention, 2025) In light of these facts, addressing water and sanitation practices at the community level remains a major public-health priority.

Despite global progress, large gaps remain in sanitation and hygiene services, particularly among low-income and marginalized communities. According to United Nations, access to safely managed water and sanitation services is still far from universal, undermining health, education and equity. Inadequate sanitation not only contributes to disease spread but also perpetuates cycles of poverty and under-development. (U.S. Centers for Disease Control and Prevention, 2025) Moreover, the social determinants of health literature recognize water and sanitation as foundational elements influencing health outcomes, inequality and well-being. (Sheel V et al., 2024) These realities underscore the importance of promoting community practices that ensure safe water and sanitation habits.

In recent years, social media has emerged as a powerful channel for health communication, public awareness and advocacy. Studies show that social media platforms are

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increasingly used by health institutions, researchers and practitioners to disseminate health information, engage communities and shape public behaviors. (Chen & Wang, 2021) As digital platforms continue to expand their reach and influence, they offer a promising opportunity to mobilize community action, foster peer learning and drive behavior change in the domain of water and sanitation. In particular, these platforms can be used for timely spreading of information on hygiene practices, emerging issues, and initiatives within the community. They also provide interactive space that allows shared experiences, reporting of sanitation concerns, and finding solutions. Digital tools bridge the gaps in communication and access to knowledge, thus allow communities to make informed decisions and sustain improvements in water and sanitation practices.

However, the potential of social media for behavior change in WASH contexts is under-explored and poses unique challenges. While awareness-raising through social platforms shows promise, systematic reviews indicate that translating social media engagement into sustained behavioral change remains complex and insufficiently studied. (Gharahmani et al., 2022) This gap suggests that more empirical research is needed to understand how online advocacy interacts with offline community practices, cultural contexts, and structural factors in sanitation interventions.

This research aims to investigate how social media advocacy can be leveraged to promote community practices in water sanitation. Specifically, the study will examine the mechanisms through which social media drives knowledge, attitudes and behaviors related to water sanitation at the community level, identify enabling and hindering factors, and propose strategic recommendations for designing effective digital-community interventions. In doing so, the research contributes to both the WASH and health communication fields, offering insights for practitioners, policymakers and communities striving for healthier, more sustainable water-sanitation systems.

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OBJECTIVES

This research study primarily aimed to assess the impact of a social media campaign on water sanitation awareness and practices among respondents:

1. Assess the level of awareness of the respondents regarding water sanitation.

2. Appraise the social media campaign in terms of:

2.1 Content

2.2 Clarity

2.3 Accuracy

3. Evaluate the effectiveness of the social media information campaign in improving water sanitation practices.

4. Determine the challenges and insights that emerged during the implementation of the social media campaign.

MATERIALS AND METHODS

Research Design

The researchers used descriptive research design to examine how social media campaign support community water sanitation practices. This research design evaluated the respondents' awareness, credibility of information shared through social media, how efficient it is in improving sanitation habits, and challenges in the implementation process. It was selected due to its strong suitability for the study.

Subjects of the Study

This study used residents of Batangas City who are active users of Facebook aged 13 years old and above. They are a reliable source of data since Batangas City is an urban area

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with widespread access to internet services and social media platforms regardless of gender and occupation. The distribution of respondents is presented in table 1.

Table 1

Distribution of the Respondents

Respondents	Population of Respondents
Batangas City	150

Data Gathering Instrument

The researchers used questionnaires in the gathering of data.

Questionnaire. The questionnaire was distributed to the respondents through Google Form, with four parts: Part 1 evaluates the Level of Awareness of the respondents, Part 2 focuses on Social Media Campaign, in Terms of Content, Clarity, and Accuracy, Part 3 assessed the Effectiveness of Social Media Campaign, and Part 4 determined the Challenges and Experiences Encountered During the Campaign.

Scoring of Responses. The four-point scale was used to score responses from parts 1, 2, 3, and 4. This scale enables respondents to express their level of agreement or feeling, from positive to negative, about specific questions or statements (McLeod, 2019).

Numerical Scale	Statistical Limit	Description	Verbal Interpretation
4	3.26 - 4.00	Strongly Agree	Very High
3	2.51 - 3.25	Agree	High
2	1.76 - 2.50	Disagree	Low

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| 1 | 1.00 - 1.75 | Strongly Disagree | Very Low |

Data Gathering Procedure

A Facebook page entitled Waves of Change was created on November 3. 2025 which becomes a key platform for disseminating information about the study and engaging potential respondents. The researchers collected the necessary data through conducting an online survey targeting residents of Batangas City. The survey period lasted from November 14, 2025 until November 22, 2025. After data compilation and organization, the gathered data are prepared for the interpretation.

RESULTS AND DISCUSSION

Level of Awareness on Water Sanitation

The level of awareness of the residents of Batangas City regarding proper water sanitation was assessed.

Cognitive Presence

Table 3. Mean Perception of the Respondents on the Level of Awareness in Water Sanitation

INDICATORS	MEAN	RANK	VERBAL DESCRIPTION	VERBAL INTERPRETATION
1. I know the importance of clean and safe drinking water.	3.88	1	Strongly Agree	Very High
2. I understand how improper sanitation can cause diseases.	3.72	3	Strongly Agree	Very High
3. I am aware of proper hand washing practices.	3.76	2	Strongly Agree	Very High
4. I know the importance of boiling or filtering drinking water.	3.56	4	Strongly Agree	Very High

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5.	I am familiar with water-borne diseases (e.g., diarrhea, cholera).	3.24	7	Agree	High
6.	I know how to properly dispose of household waste.	3.16	8	Agree	High
7.	I understand why keeping toilets clean is necessary.	3.32	6	Strongly Agree	Very High
8.	The material addresses real sanitation problems in communities.	3.04	9	Agree	High
9.	I know the importance of storing water in clean containers.	3.44	5	Strongly Agree	Very High
10.	I recognize government or community programs about water sanitation.	.8 4	10	Agree	High
	OVERALL MEAN	**3.43**		**Strongly Agree**	**Very High**

The results revealed that respondents already possess a very high level of foundational knowledge regarding core water sanitation practices, such as the importance of clean water and proper handwashing. This high baseline knowledge is an important prerequisite for a successful social media campaign, as it allows the communication efforts to focus on specific, actionable behavior change rather than foundational education, aligning with principles established by global WASH monitoring bodies (WHO & UNICEF, 2022). However, the lower ranking of statements related to formal program recognition and addressing community problems suggests a disconnect between personal health awareness and broader community or governmental intervention frameworks. This indicates that the campaign should focus on linking individual actions to collective community goals

Assessment of the Social Media Campaign

The assessment of the social media campaign was evaluated in terms of content, clarity, and accuracy. The following tables present the composite means and verbal interpretations based on the respondents' perceptions.

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Content

Table 4. Mean Perception of the Respondents on the Assessment of the Social Media Campaign in Terms of Content

INDICATORS		MEAN	RANK	VERBAL DESCRIPTION	VERBAL INTERPRETATION
1.	The content of the post provided relevant information about water sanitation.	3.80	2	Strongly Agree	Very High
2.	The content covers important and timely water sanitation issues.	3.44	7	Strongly Agree	Very High
3.	The campaign delivers clear messages on the importance of clean water.	3.84	1	Strongly Agree	Very High
4.	The posts contain useful tips and practical sanitation practices.	3.64	4	Strongly Agree	Very High
5.	The content encourages responsible water habits among viewers.	3.28	9	Strongly Agree	Very High
6.	The social media page uses visuals to enhance understanding of the topic.	3.68	3	Strongly Agree	Very High
7.	The content appeals to both general audience and students.	3.20	6	Strongly Agree	Very High
8.	The information raises awareness about waterborne diseases.	3.60	5	Strongly Agree	Very High
9.	The post promotes positive sanitation values and behavior change.	3.56	6	Strongly Agree	Very High
10.	The variety of content (infographics, captions) maintains viewer interest.		8	Strongly Agree	Very High
OVERALL MEAN		**3.54**		**Strongly Agree**	**Very High**

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The results revealed that the respondents strongly agreed that the campaign provided relevant and meaningful information about water sanitation, as shown by the composite mean of 3.54 interpreted as very High. The highest indicator showed that the campaign delivered clear messages on the importance of clean water, while the lowest indicator indicated that encouraging responsible sanitation habits was less emphasized. This suggests that while the campaign was effective in presenting essential content, further enhancement may be needed to promote stronger behavioral engagement.

Clarity

Table 5. Mean Perception of the Respondents on the Assessment of the Social Media Campaign in Terms of Clarity

	INDICATORS	MEAN	RANK	VERBAL DESCRIPTION	VERBAL INTERPRETATION
1.	The language used is simple and easy to understand.	3.58	3	Strongly Agree	Very High
2.	Technical terms are clearly explained when used.	3.55	6	Strongly Agree	Very High
3.	The key message is easy to identify in each post.	3.56	5	Strongly Agree	Very High
4.	The campaign uses clear captions or descriptions for each content.	3.58	2	Strongly Agree	Very High
5.	Instructions or recommended practices are clearly stated.	3.62	1	Strongly Agree	Very High
6.	Visuals (images, infographics) are easy to interpret.	3.54	8	Strongly Agree	Very High
7.	Sentences are well-structured and direct.	3.53	9	Strongly Agree	Very High
8.	The tone of communication is appropriate and friendly.	3.55	6	Strongly Agree	Very High

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9.	The content flows logically from one idea to another.	3.53	10	Strongly Agree	Very High
10.	Viewers can easily understand the main goal of the campaign.	57	4	Strongly Agree	Very High
	OVERALL MEAN	**3.57**		**Strongly Agree**	**Very High**

The results revealed that the respondents strongly agreed that the campaign materials were presented with clarity, with a composite mean of 3.57 interpreted as Very High. The highest mean indicated that instructions and recommended practices were clearly stated, while the lowest mean showed that the logical flow of ideas was comparatively weaker. This implies that although the content was understandable and easy to follow, improvements in organizing the presentation of ideas could further enhance comprehension.

Accuracy

Table 6. Mean Perception of the Respondents on the Assessment of the Social Media Campaign in Terms of Accuracy

INDICATORS		MEAN	RANK	VERBAL DESCRIPTION	VERBAL INTERPRETATION
1.	The information shared is factual and evidence-based.	3.62	5	Strongly Agree	Very High
2.	Data presented appears to be taken from reliable sources.	3.65	2	Strongly Agree	Very High
3.	Claims related to water sanitation are supported by scientific facts.	3.59	7	Strongly Agree	Very High
4.	The posts avoid misinformation or exaggerated statements.	3.60	6	Strongly Agree	Very High
5.	The campaign uses statistics or scientific references when possible.	3.51	10	Strongly Agree	Very High

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6.	Health and sanitation guidelines shared follow official (e.g. WHO, DOH).	3.70	1	Strongly Agree	Very High
7.	The information matches real-world sanitation practices.	3.63	4	Strongly Agree	Very High
8.	Recommendations given are safe and accurate.	3.65	2	Strongly Agree	Very High
9.	Sources or citations are provided when necessary.	3.51	9	Strongly Agree	Very High
10.	The content is regularly updated to ensure accuracy.	57	8	Strongly Agree	Very High
	OVERALL MEAN	**3.60**		**Strongly Agree**	**Very High**

The results revealed that the campaign was perceived as highly accurate, supported by a composite mean of 3.60 interpreted as Very High. Respondents strongly agreed that the information aligned with official health guidelines and was factual and reliable. However, the lowest indicators suggested that the use of statistics and explicit citations was limited. This indicates that while the campaign maintained strong credibility, incorporating more visible scientific references may further strengthen its accuracy.

Effectiveness of the Social Media Campaign

The effectiveness of the social media campaign in improving water sanitation practices among the respondents was determined using various behavioral indicators.

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Table 7. Mean Perception of the Respondents on the Effectiveness of Social Media Campaign

INDICATORS		MEAN	RANK	VERBAL DESCRIPTION	VERBAL INTERPRETATION
1.	Information from social media made me more aware of proper sanitation habits.	3.65	3	Strongly Agree	Very High
2.	I improved my water-handling habits because of the social media information.	3.58	7	Strongly Agree	Very High
3.	I now wash my hands more properly and frequently.	3.61	6	Strongly Agree	Very High
4.	I clean water containers more often.	3.65	3	Strongly Agree	Very High
5.	I now prefer treated, boiled, or filtered water.	3.65	3	Strongly Agree	Very High
6.	I practice safer household waste disposal.	3.69	1	Strongly Agree	Very High
7.	I share sanitation information with others after seeing it online.	3.55	10	Strongly Agree	Very High
8.	I follow sanitation steps I learned from social media.	3.58	7	Strongly Agree	Very High
9.	I am more cautious about water sources now.	3.67	2	Strongly Agree	Very High
10.	Social media campaign influenced me to support clean water programs.	57	9	Strongly Agree	Very High
OVERALL MEAN		**3.62**		**Strongly Agree**	**Very High**

The results revealed that the respondents strongly agreed that the campaign was effective in influencing their sanitation practices, as indicated by the composite mean of 3.62

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interpreted as Very High. The highest indicator showed that respondents practiced safer household waste disposal after viewing the campaign, while the lowest indicator revealed that fewer respondents shared the sanitation information with others. This suggests that although the campaign successfully promoted individual behavioral changes, it was less effective in encouraging respondents to disseminate the information within their social networks.

Challenges and Experiences Encountered During the Campaign

The challenges and experiences encountered by the respondents during the implementation of the social media campaign were assessed through selected indicators.

Table 8. Mean Perception of the Respondents on the Challenger and Experiences Encountered During the Campaign

INDICATORS	MEAN	RANK	VERBAL DESCRIPTION	VERBAL INTERPRETATION
1. I noticed that technical or visual quality issues sometimes affected the posts (e.g., resolution, layout).	3.25	7	Agree	High
2. Internet access limits my ability to view sanitation information.	3.11	8	Agree	High
3. I sometimes doubt the truthfulness of what I see online.	3.43	5	Strongly Agree	Very High
4. Some posts about sanitation lack clear instructions.	3.05	10	Agree	High
5. I observed that the campaign page sometimes had limited audience engagement (likes, comments, shares).	3.28	6	Strongly Agree	Very High
6. I believe that the campaign could have used more interactive content to reach more viewers.	3.47	4	Strongly Agree	Very High

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7.	Some posts are not engaging enough to capture interest.	3.06	9	Agree	High
8.	I became more aware of proper water sanitation practices after viewing the campaign posts.	3.50	2	Strongly Agree	Very High
9.	I feel encouraged to support or practice proper water sanitation because of the campaign.	3.47	3	Strongly Agree	Very High
10.	I believe that social media campaigns like this can influence positive environmental and health habits.	55	1	Strongly Agree	Very High
	OVERALL MEAN	**3.24**		**Agree**	**High**

The results revealed that respondents generally agreed that they experienced several challenges while interacting with the campaign materials, as shown by the composite mean of 3.24 interpreted as High. The highest indicator showed strong agreement that social media campaigns can influence positive health and environmental habits, while the lowest indicator revealed that some posts lacked clear instructions. This implies that although the campaign was impactful, issues such as technical limitations, clarity of certain posts, and internet accessibility affected the overall experience of the respondents.

CONCLUSIONS

In connection with the findings of the study, the following conclusions were drawn:

1. The community possesses strong foundational knowledge about water sanitation, which supports the effectiveness of digital information campaigns.

2. The social media campaign was highly effective in delivering clear, accurate, and relevant content that enhanced community awareness and motivated improved sanitation behaviors.

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3. Behavioral change occurred, particularly in household sanitation practices, demonstrating that social media can be a powerful tool for influencing public health behavior.

4. Despite positive results, gaps remain in audience engagement, content flow, and the visibility of credible scientific references, suggesting improvements for future campaigns.

5. Technical limitations and internet connectivity issues hindered full participation, indicating the need for more accessible and user-friendly campaign materials.

6. While the campaign successfully informed and educated, it was less effective in turning viewers into active advocates who share information with others.

RECOMMENDATIONS

In light of the findings and conclusions of the study, the following recommendations are hereby presented:

1. Enhance engagement strategies by including interactive content such as polls, quizzes, short videos, and community challenges to increase participation and sharing.

2. Strengthen behavioral-change messaging by incorporating real-life examples, testimonials, and step-by-step guides to encourage responsible water habits.

3. Improve content organization and flow to ensure that posts are easy to follow and logically connected.

4. Increase the visibility of scientific sources by including citations, infographics with statistics, and links to verified sanitation guidelines.

5. Produce more visually appealing and high-resolution materials to address technical issues that may affect readability.

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