

Rethinking Recycling: Understanding Audience Perception for Designing Effective Campaigns

Kempen Kitar Semula: Memahami Persepsi Khalayak untuk Rekabentuk Kempen Berkesan

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ABSTRACT

Recycling campaigns uses various methods and platforms such as social media, advertising, mobile applications, and digital games aim to raise awareness and educate public on the importance of recycling through visual information. After almost three decades of recycling campaigns carried out by responsible party to ensure that 40 percent of waste can be reused by 2025, the community's response to the initiative is still low. Although different methods and platforms are used in recycling it still does not deliver profound impact to the public. Therefore, this study will specifically explore the audience's perception of recycling campaign which is influenced by several factors such as design elements, the uses of colour and visuals, information arrangement, as well as emotional involvement. This study is important to identify the factors that influence the audience's perception and involvement in the campaign. Through the literature review method, this study describes the elements of recycling campaign design that act as independent variables, and the audience's perception as the dependent variable. A conceptual framework is built as initiative to clearly explain the study on the factors that influence the audience's perception as reference to create an effective recycling campaign. It provides valuable guidance to campaign organizers, policy makers, and environmental advocates to plan and implement effective recycling campaign strategies for focused target group and foster positive environmental change.

Keywords: *recycling campaign; audience perception; influence; attitudes; effectiveness*

ABSTRAK

Kempen kitar semula menggunakan pelbagai kaedah dan platform seperti media sosial, pengiklanan, aplikasi telefon bimbit dan permainan digital bertujuan untuk memberi kesedaran dan mendidik masyarakat tentang kepentingan kitar semula melalui kaedah penyampaian maklumat secara visual. Selepas hampir tiga dekad kempen kitar semula dijalankan oleh pihak tertentu dalam usaha memastikan 40 peratus sisa buangan dapat digunakan semula pada 2025, sambutan masyarakat terhadap inisiatif itu masih rendah. Walaupun pelbagai kaedah dan platform digunakan di dalam kempen alam sekitar ia masih tidak memberi impak yang mendalam kepada masyarakat umum. Oleh itu, kajian ini secara khusus akan meneroka persepsi audiens terhadap kempen kitar semula yang dipengaruhi oleh beberapa faktor seperti reka bentuk, penggunaan warna dan visual, susunan maklumat, serta penglibatan emosi. Kajian ini penting dijalankan bagi mengenalpasti faktor yang mempengaruhi persepsi dan penglibatan audiens di dalam kempen berkenaan. Melalui kaedah tinjauan literatur, kajian ini menghuraikan elemen reka bentuk kempen kitar semula yang bertindak sebagai pembolehubah bebas, dan persepsi audiens sebagai pembolehubah bersandar. Kerangka konsep dibina bagi menerangkan secara jelas mengenai faktor yang mempengaruhi persepsi audiens dalam inisiatif untuk

mewujudkan kempen kitar semula yang lebih berkesan. Ia sekaligus diharap dapat memberi panduan kepada penganjur kempen, pembuat dasar, dan pembela alam sekitar untuk merancang dan melaksanakan strategi kempen kitar semula yang lebih berimpak kepada golongan sasaran sekaligus mendorong kepada perubahan positif untuk alam sekitar.

Keywords: *kempen kitar semula; persepsi audiens; pengaruh; sikap; keberkesanan*



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1. INTRODUCTION

The need to protect the environment and conserve natural resources has become increasingly urgent in recent years. One strategy that has gained traction is recycling (Cui et al., 2022), which can help to reduce waste and promote sustainability. While recycling is often seen as an individual responsibility; governments, businesses, and non-profit organizations have also played a significant role in promoting recycling campaigns.

A recycle campaign is an effort to encourage people to recycle waste materials and to raise awareness about the importance of recycling for environmental sustainability. Recycling campaigns can take various forms, including public education programs, community outreach initiatives, and media campaigns (Desa et al., 2012). According to (Santi et al., 2020) the goal of a recycling campaign is to motivate individuals and communities to act and recycle more. This can include educating people about the benefits of recycling, such as reducing waste, conserving natural resources, and decreasing pollution (Akman et al., 2022). Recycling campaigns can also focus on specific items, such as plastic, paper, or electronics, and provide information on how to properly recycle these materials. Recycling campaigns can be initiated by a variety of organizations, including local governments, non-profit organizations, and businesses (Palm et al., 2019). They may involve community events, such as recycling drives, workshops, and contests, as well as public service announcements, social media campaigns, and other forms of advertising. Despite the importance of recycling and extensive efforts to educate the public about recycling, there remains a significant gap in audience perception and understanding of recycling campaigns. While being aware of information is associated with higher participation, the relationship between knowledge and actual recycling behaviour, or frequency of recycling remains inconclusive (Lee et al., 2022). Many recycling campaigns have struggled to effectively engage and motivate the audience to participate in recycling behaviours (Jesson, 2009). The problem lies in the audience's perception, as they may not see the relevance of recycling to their personal values.

Therefore, it is important to conduct this study to highlight the need for improved strategies to enhance recycling campaign effectiveness. This requires an understanding of the factors that influence audience perception and the design of effective campaign strategies that can engage and motivate the audience to participate and act. The effectiveness of recycling campaigns heavily relies on the perception and attitudes of the target audience. Recycling campaigns should be customized to the target audience's perceptions and attitudes, addressing factors influencing their behaviour and effectively addressing barriers and motivations for successful initiatives. Understanding how individuals perceive and engage with recycling initiatives can provide valuable insights for designing impactful campaigns that encourage sustainable behaviours.

2. RECYCLE CAMPAIGN

Rapid urbanization, population growth, and economic development have increased waste generated worldwide in recent years. According to the latest statistics, 2.01 billion tonnes of municipal solid waste was generated globally in 2016. This figure is expected to increase to 3.4 billion tonnes by 2050 (Kaza

et al. 2018). Till now, countries are trying to improve the level of waste recycling to deal with the resource crisis and environmental pollution (Cohen et al., 2021; Huang et al., 2020; Knickmeyer, 2020). A recycling campaign is a coordinated effort aimed at promoting and encouraging recycling practices within a community or organization (Gibovic & Bikfalvi, 2021). Such campaigns are designed to raise awareness about the importance of recycling, educate people about proper recycling methods, and motivate individuals to actively participate in recycling initiatives. The history of recycling campaigns can be traced back several decades, as the need for sustainable waste management and environmental conservation became increasingly recognized. In the 1990s, recycling campaigns expanded globally, emphasising more on infrastructure development and public education. Governments and organizations invested in recycling facilities, improved collection systems, and increased the types of materials accepted for recycling. Educational initiatives, including school programs and public awareness campaigns, promoted the benefits of recycling and proper waste management. In recent years recycling campaigns now highlight the environmental, social, and economic benefits of recycling and emphasize the importance of reducing consumption and promoting responsible production. Advancements in technology have facilitated recycling efforts. For example, recycling sorting facilities now utilize advanced sorting technologies like optical sensors and robotics (Sinthiya et al., 2022). Innovative recycling initiatives have emerged, such as e-waste recycling, composting programs, and initiatives to tackle specific waste streams like plastic pollution. Today, recycling campaigns continue to play a crucial role in promoting sustainable waste management practices and raising public awareness about the importance of recycling for environmental conservation and resource preservation.

3. TYPES AND PLATFORMS OF RECYCLE CAMPAIGN

Campaign type and platform selection depends on goals, target audience, budget, and resources. Effective recycling campaigns often combine multiple approaches for community sustainability. Some common types of recycle campaigns and the platforms to utilize are Educational Campaigns which aim to raise awareness about recycling and its importance. The campaign type and platform should be chosen based on the target audience, available resources, and recycling campaign goals, with a multi-platform approach often being most effective.

Education is key to generating broader awareness of the importance of recycling and how to recycle right (Sim, 2020). Promoting recycling through education involves various platforms like school programs, community workshops, informative websites, social media campaigns, and partnerships with local organizations. This educates an informed population to embrace recycling as a responsible practice for the planet's well-being. Different methods cater to various learning styles, making education accessible to a diverse range of individuals, each with its advantages and specific goals.



Image 1 Recycle campaign conducted amongst school children.
Source: Jacintha (2020)

Recycle campaigns come in various types and can be conducted on different platforms. Some common types of recycle campaigns and the platforms to utilize are Educational Campaigns which aim to raise awareness about recycling and its importance. Education is key to generating broader awareness of the importance of recycling and how to recycle right (Sim, 2020). Utilizing various campaign types and platforms, organizations and communities can effectively educate the public about recycling and encourage eco-friendly habits, maximizing the impact of these campaigns by tailoring their approach.



Image 2: Community recycle campaign activity conducted by organization.
Source: Rafee (2022)

Recycle campaign can also utilizes social media platforms like Facebook, Instagram, or Twitter to spread the message of recycling and encourage people to participate in eco-friendly practices (Dash et al., 2023). Social media are being increasingly utilized by federal, state, and local governments around the country to spread environmental awareness to the largest audience possible. Social media comes into play as a way of “talking” with target audience to influence and change public behaviour. Social media usage should be thoughtfully and responsibly used, considering potential consequences, privacy, security, and critical consumption of information.

In today's rapidly changing world, responsible parties must ensure accurate and tailored information to meet diverse audience needs, enhancing communication effectiveness and building trust and positive relationships, especially in an interconnected world.

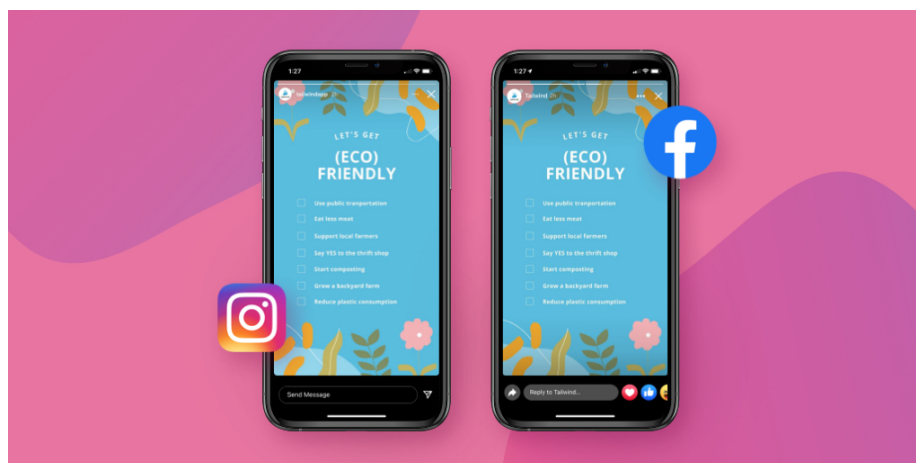


Image 3 Recycle Campaign content in different social media platform.
Source: Sheila (2023)

Interactive Apps and Games through mobile apps or online games can teach users about recycling in a fun and engaging way. When done right, gamification and digitalization can be a highly potent tool

to increase audience motivation to be part of the recycling habit solution (Santti et al., 2020). Implementing strategies and continuously refining approaches based on user feedback and emerging technologies can create effective tools for motivating and educating people about recycling and environmental conservation.



Image 4 Digital recycling game to educate consumers on e-waste.
Source: McQuarrie (2022)



Image 5 Recycle Coach Apps – Free educational recycle mobile apps.
Source: Rosenberg (2021)

The audience's perception in these varying recycle campaign types and platform is critical to its success. By understanding and addressing the factors that can influence perception, the campaign can be designed to effectively engage and motivate the audience to participate in recycling behaviours. Adaptability and responsiveness are crucial for long-term success, as audience perceptions and behaviors may change over time.

3.1 Audience Perception on Recycling Campaign

Audience perception of a recycling campaign can vary depending on several factors, including the effectiveness of the campaign, the target audience's level of awareness and understanding of recycling, and the overall messaging and presentation of the campaign. Recycling campaigns should consider audience perceptions and tailor messaging and strategies. Effective communication, transparency, and

real-world impact can improve perception, while ongoing engagement and education can shape positive attitudes towards recycling efforts. Research by Kim et al., (2020) highlights the significance of employing targeted messages that resonate with specific audience segments. They found that campaigns tailored to the values, beliefs, and preferences of the target audience were more effective in encouraging recycling behaviours. Here are some possible perceptions that audiences may have regarding a recycling campaign:

Positive perception: A well-executed recycling campaign can generate a positive perception among the audience (Teng et al., 2019). If the campaign effectively communicates the importance of recycling, provides clear instructions, and highlights the positive environmental impact of recycling, the audience may perceive the campaign as informative and inspiring. They may feel motivated to participate and view recycling as responsible and beneficial action.

Indifference: Some members of the audience may not have a strong opinion or emotional connection to recycling campaigns. They might be aware of recycling but may not feel personally motivated to participate or support the campaign. This indifference could stem from a lack of understanding about the environmental benefits of recycling or a perception that individual actions may not have a significant impact (Duong, 2023).

Confusion: If a recycling campaign fails to provide clear guidelines or instructions on how to recycle properly, it may leave the audience feeling confused or uncertain. Budihardjo et al., (2022) mention that lack of clarity regarding accepted recyclable materials, collection methods, or local recycling facilities can hinder audience engagement. Confusion can also arise if there are inconsistencies in recycling practices or guidelines across different regions, leading to misunderstandings and frustration.

Inspiration and empowerment: A recycling campaign that effectively communicates the potential of collective action and highlights success stories can inspire and empower the audience. Seeing tangible examples of how recycling efforts have made a positive impact on the environment or communities can motivate individuals to participate actively. Messages that emphasize individual responsibility and highlight the role of recycling in building a sustainable future can foster a sense of empowerment among the audience (Fang et al., 2022)

In conclusion, a recycling campaign's success in positively influencing user perception relies on its educational value, engagement, accessibility, authenticity, and the ability to foster lasting behavioral changes. A recycling campaign can significantly and lastingly positively influence user perception and behavior by focusing on specific factors and strategies. By effectively addressing these aspects and implementing well-rounded strategies, recycling campaigns can effectively inspire and motivate individuals, gain the support and participation of users leading to a more significant impact on recycling behaviours and environmental sustainability. There are several factors that need to be considered to ensure a recycling campaign can provide the best information to the audience. Although most recycling campaigns now use various elements to attract audience attention, the perception of users towards recycling campaigns is still a question. Are the elements used in recycling campaigns contribute to giving a good perception to users and what factors influence their positive or negative perception? This study aims to explore the audience's perception of recycling campaigns, examining factors such as message delivery, campaign design, and emotional appeal.

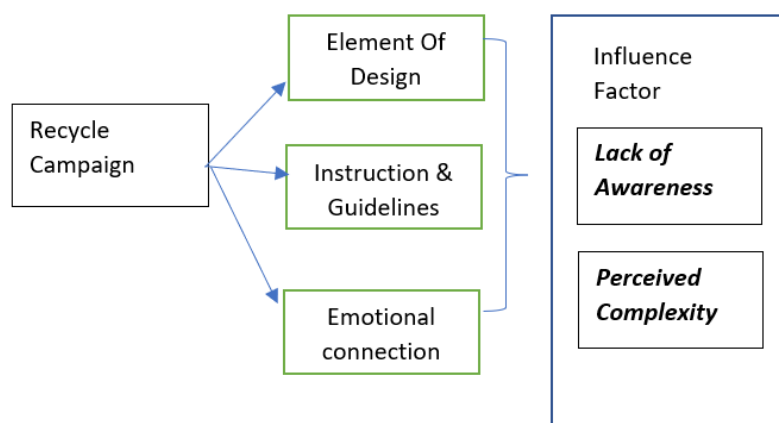


Figure 1 Conceptual Framework of audience perception on recycle campaign.

The conceptual framework in Figure 1 shows the influence factor which are dependent to a recycle campaign. The awareness and perceived complexity of audience towards a recycle campaign can change depending on applying effective elements of design, providing clear instructions and guidelines, and engaging emotional connection into a recycling campaign. In summary, audience perception is a fundamental aspect of a recycling campaign, impacting engagement, behaviour change, and the overall success of the initiative. Understanding and shaping target audience perception can enhance campaign outcomes.

4. FUTURE WORK

To answer the research questions that were built based on the literature review, this study will conduct more detailed study through visual analysis to analyses the elements of design such as logo and branding for campaigns, the uses of visual graphics and imagery which helps draw attention to the campaign's content and evoke emotions. The visual analysis will also analyse on appropriate colour palette that aligns with the campaign's theme and conveys the message effectively, designing persuasive and visually prominent Call to call action (CTAs) that encourage the audience to take specific actions, participating in events, or spreading awareness and organizing the campaign's information hierarchy in a clear and logical manner to ensure important messages are easily accessible and understood. Next, based on the visual analysis made this study will further develop a recycling campaign design strategy which will adapt to specific context and audience. The campaign design strategy will be regularly assessed to ensure the effectiveness of the recycling campaign and be open to refining and adapt to new approach for better results. Implementing these strategies and regularly assessing and adapting can enhance the chances of your recycling campaign achieving its objectives and positively impacting the environment.

5. DISCUSSION AND CONCLUSION

In conclusion, a comprehensive analysis of audience perception in recycle campaigns reveals its paramount importance in achieving successful and impactful initiatives. Recycling campaigns shape sustainable behaviours, but their success depends on understanding and influencing audience perception. Recognizing attitudes, knowledge, motivations, and barriers, and implementing tailored strategies, recycling initiatives can have lasting environmental impact. Understanding how the target audience perceives and engages with the campaign is essential for motivating behaviour change, fostering positive attitudes towards recycling, and maximizing the campaign's reach and effectiveness. By tailoring the campaign message, visuals, and communication channels to resonate with the audience's values and interests, organizers can enhance message reception and encourage active

participation. Positive audience perception leads to increased motivation, word-of-mouth promotion, and a stronger public image, ultimately contributing to the long-term sustainability of the campaign's impact (Ha, 2022). As recycling campaigns continue to play a vital role in promoting environmental sustainability, acknowledging the significance of audience perception becomes even more critical (Peng et al., 2020). Regularly monitoring feedback, analysing data, and being receptive to constructive criticism enable campaign organizers to refine their strategies and better align with the audience's needs. In summary, a well-executed recycle campaign that takes audience perception into account can inspire positive behavioural changes, enhance public awareness, and cultivate a greener, more environmentally conscious society. Through a combination of compelling messages, targeted approaches, and ongoing evaluation, we can pave the way for a more sustainable future for our planet.

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AUTHOR CONTRIBUTIONS

All authors contributed equally on this research.

CONFLICT OF INTEREST

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