

# The integration of digital culture and men's participation in promoting food waste reduction on social media

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## Abstract

Addressing gender issues in food waste management can offer a comprehensive understanding of the allocation of roles in the utilization of financial resources and the potential economic benefits. Now a days, both men and women can optimize their participation in food waste reduction by promoting their ideas through social media. Genderlect theory use to analyse the differences of communication style among men and women in promoting waste reduction on social media. Purpose: Assuming that men's participation in promoting food waste reduction on social media can expand the scope of audience participation, then this study aims to explore the integration of digital culture and men participation on social media on promoting food waste reduction on social media. Method: qualitative content analysis applied to analysed 154 individuals' contents on Instagram and X in promoting food waste reduction in the period of January-August 2024. Result: men is less persuasive and are less likely to invite audience participation in Instagram and X their content focus on information of technical aspects of technological use, collaboration and company or organizational activities. Finding: The dominance of men on social media is not fully able to attract audiences to participate in food waste reduction, as male content focuses more on providing formal information. Implication: Further research is needed to explore the role of men's communication styles in campaigning for environmental issues to be more comprehensive and contribute to increasing audience participation in solving environmental problems.

## Keywords

Food waste reduction, Men's participation, Social media campaign, Genderlect theory

## Introduction

Consumption behaviours are closely related with high level of food waste generation in household [1]. The existing literature highlights the importance of understanding factors contributing to the negative effects of food waste, both external and internal in the household. This factor includes contextual, demographic, behavioural and social

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dimensions, which influence consumer behaviour related to food waste, such as planning, shopping, storing, cooking, eating, managing leftover, and assessing edibility [2]. In practice, food waste management is very complex, therefore it is necessary to have an integrated strategy to prevent the emergence of food waste from a multidisciplinary perspective. In today's digital era, this plan must include the incorporation of digital culture and the active involvement of all parties [3].

Integrating digital culture or the habit of using digital devices in communicating with food waste reduction advocacy can encourage the involvement of a wider audience, including men, who have historically been less involved in household food management practices. Digital culture in this study refers to the ability to understand and practice the provisions and rules in communicating in the digital world. Why men's involvement is important to pay attention to, because according to data, men are the dominant group in the digital world. Data from Statista.com shows that men are the main users of social media worldwide, especially on X (Twitter), which accounts for 60.3%, with LinkedIn and Facebook following 57%. On the other hand, various reports show that nearly 5 billion people use social media, with a usage time of 2 hours and 23 minutes every day [4]. This condition shows that there is extraordinary potential, if men are involved in promoting the reduction and handling of food waste on social media [4].

Men and women have different communication styles, so men's involvement in these digital initiatives can contribute to a more equitable and inclusive approach to minimizing food waste, questioning traditional gender roles, and promoting a sense of collective accountability within the home. Leveraging technology effectively and involving diverse participants can guide us towards a more sustainable and equitable food system [5][6]. By exploring the differences in the communication styles of men and women in digital media, we can understand how the difference in message construction between men and women in persuading the audience. This review will also lead us to an in-depth understanding of how men's contributions on social media are in promoting food waste reduction.

The study aims to explore the integration of digital culture and men's participation in promoting food waste reduction on social media. This research assumes that if men are actively involved in campaigning for food waste reduction, then more audiences will be reached and will later participate in food waste reduction. The characteristics of social media that are open, easily spread and accessible at all times are a strength that allows for wider audience engagement.

## Theoretical Framework

Genderlect Theory and Digital Culture. Bruno Latour's [7] concept of technological mediation and social construction of technology can provide a useful analytical framework for understanding the integration of digital culture and men's participation in promoting food waste reduction [8]. The integration of digital culture and social media platforms can facilitate new forms of community engagement and collective

action, which can be leveraged to promote food waste reduction. The dynamics of social media engagement and the potential differences in participation between genders are also be considered.

The genderlect theory suggest that men and women have a distinct communication style, with women tend to be more emotional, expressive and on building relationship, while men more instrumental [9], factual and focus on status and hierarchy [8]. This has implications for design and implementation of digital campaigns aimed at reducing food waste, as the messaging and strategies may need to be tailored to engage a diverse audience, including men.

By understanding these differences, digital campaigns can be tailored to engage both genders effectively, addressing their unique needs and communication preferences. Furthermore, the integration of digital culture and social media can enable the tracking and quantification of food waste, providing data-driven insights to inform policy and targeted interventions.

Integrating these gender-specific communication preferences into digital campaigns on food waste reduction can help engage a broader audience and address the unique barriers and motivations of men and women. For example, digital campaigns targeting men may emphasize the financial and environmental benefits of reducing food waste, as well as practical tips and tools for implementing waste-reducing strategies in their households. In contrast, campaigns aimed at women may focus on the emotional and social aspects of food waste, such as the connection between food and family, and the sense of accomplishment in minimizing waste.

**Waste Reduction Campaign on Social Media.** Social media sites like Facebook, Twitter, and Instagram can serve as effective instruments for involving males in food waste reduction initiatives. Digital campaigns may effectively convey the significance of the issue and offer pragmatic ways for minimizing household trash.

Furthermore, by utilizing the competitive and status-oriented characteristics of some male communication styles, digital efforts could integrate gamification elements, such as leaderboards or challenges, to motivate men to actively participate in minimizing their family food waste. Engaging influencers and opinion leaders within male-dominated social circles could be a useful technique, as their endorsement and engagement can help mainstream and legitimize the issue among their followers.

The integration of digital culture enables the tracking and measurement of food waste, producing data-driven insights to inform policy and targeted actions. The fundamental components of the social media campaign may include [7] [9] [12]: (1) Educational materials; (2) Customized messaging; (3) Collaboration with male social media influencers, celebrities, or community leaders; (4) Incorporation of interactive components; (5) Utilization of digital tools and technologies; (6) Development of a social community to cultivate an online network; (7) Engagement with stakeholders; and (8) Assessment and evaluation of impact.

Executing a thorough, gender-inclusive digital campaign may effectively merge digital culture and male participation in advocating for food waste reduction on social media, acting as a powerful tool for driving sustainable change and addressing this global challenge.

## Method

This research employed a qualitative content analysis approach to investigate the integration of digital culture and men's participation in promoting food waste reduction on social media. This study reviewed a range of Instagram and X content focused on food waste reduction and men's roles over six months from January to August 2024. Both platforms were chosen because they are popular platforms among social media users and have specific characteristics for both female and male users. The use of X is dominated by men, while Instagram is dominated by female users. There are 1,678 social media posts on food waste reduction posted by individuals, community and organization. The data collection procedure entailed the identification of pertinent hashtags, including #foodwaste, #foodwastereduction, and #zerowaste, posted by individual's account. The three hashtags were chosen because they are widely used by food waste reduction enthusiasts. As a result we found 104 post on X and 50 posts on Instagram.

*Data Analysis.* The coding process is carried out using nVivo 14 software with a focus on the use of language, word selection and sentence structure that reflects the quality of information (informativeness), persuasion ability (persuasiveness), and benefits of the information conveyed. Informativeness, for example, is characterized by the use of sentences that describe the benefits of waste reduction activities. Persuasiveness is characterized by words that invite or motivate the audience to be involved in the activities being campaigned, and the benefits are shown with captions that describe the benefits of the activities carried out. The use of the application helps in integrating all the content used and processed digitally so that it can maintain the validity and reliability of the analysis carried out [10].

## Results and Discussion

The analysis of social media content revealed that while there is a growing presence of food waste reduction campaigns on platforms like Instagram and X, the level of male engagement is often limited, for instance as in [Figure 1](#) and [Figure 2](#).

The two content in [Figure 1](#) displayed the examples of the account owned by the man @paul.fermentation on Instagram, and @AJStein\_de on X focus on information from the results of the activities they carry out in reducing food waste. The selection of images is not intended to persuade, which in nVivo coding is included in the category of informing and is not included in the category of persuasion or motivation.

Figure 2 are the examples of content posted by women on Instagram and X, looking more expressive with captions that start with the words “are you ready” by @drpaynenestor on Instagram and photos that also evoke the emotions of the audience through her expression displayed by @reginatboyce on X.

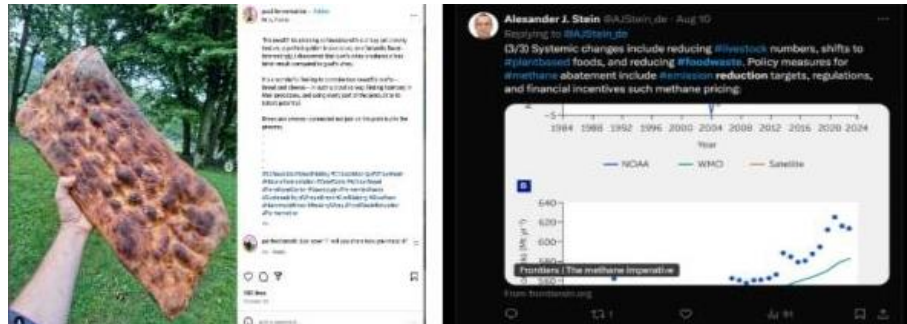


Figure 1. Men post on Instagram and X

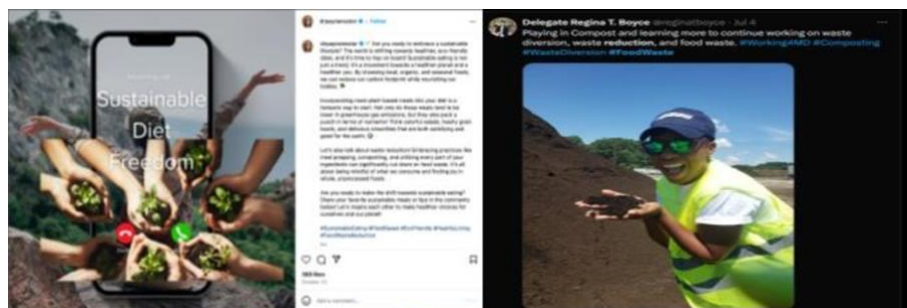


Figure 2. Women post on Instagram and X

The choice of words in captions, expressions and image layout between male and female account owners proves that men and women have different communication styles as assumed in genderlect theory [9]. Consequently, the difference resulting different effects on the audience. The posts of male accounts on both Instagram and X, are more focused on individual achievements both as individuals and representatives of organizations or companies. Communication styles tend to be rigid with the choice of words and non-expressive photos or images.

The result also found that men is less persuasive and in Instagram and X their content focus on information of technological aspects, collaboration and company or organizational activities. In short, the findings of this study suggest that the integration of digital culture and men's participation in promoting food waste reduction on social media can be an effective approach when it incorporates a range of targeted strategies and tactics. By increasing the reach and engagement potential of digital platforms, while also addressing the unique needs and preferences of male audiences, drive more impactful and sustainable behavioural change in the fight against food waste [5], [6]. However, in accordance with the qualitative characteristics of the research, the results of this study are not intended to generalize the users of Instagram and X, but rather focus on depicting how observers of the food waste problem express their experiences and meanings towards the problem of food waste.



## Conclusion

Digital campaigns can significantly contribute to sustainable behavioural change and promote a more inclusive approach to food waste reduction by addressing the gendered aspects of current messaging and content. Future study needs to investigate the intricacies of male involvement in sustainability initiatives, the influence of digital platforms on behavioural modifications, and the formulation of comprehensive, gender inclusive strategies to tackle global waste concerns.

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