The influence of news reporting on public behavior: Use reports of cosmetics polluting the environment to illustrate the public impact

Yuefei Cong¹ Qiyu Xu^{2,*}

¹Mian Yang Dong Chen School, Sichuan, China ²Toronto Royal Crown Academic School, Toronto, Canada

*Corresponding author: alicexu361@gmail.com

Abstract:

With increasing environmental awareness, the impact of cosmetics on the environment has gained attention. This paper explores the influence of news reporting on public behavior, using the example of cosmetics pollution to illustrate the public impact. The study reveals that media reports on environmental issues, particularly those related to the cosmetics industry, can significantly influence public awareness and behavior. The research employed questionnaire surveys and comparative analysis to assess the public's perception of cosmetic pollution and their purchasing habits. The findings indicate that the media's portrayal of the environmental impact of cosmetics has led to a shift in consumer behavior, with an increasing number of people opting for eco-friendly products. The study also highlights the role of the cosmetics industry in responding to public and media scrutiny by adopting more sustainable practices. The paper concludes by emphasizing the importance of public participation, government regulation, and industry self-regulation in addressing cosmetic contamination and promoting environmental sustainability. It calls for a collective effort to ensure the cosmetics industry develops in a manner that is both environmentally friendly and sustainable.

Keywords: News Report; Cosmetics industry; Environmental Pollution; Public Reflection

1. Introduction

The spread of consumerism is the driving force behind modern environmental issues. With the advent of the age of consumerism, mankind has gained great

material wealth, but it has also generated great waste of resources and environmental pollution[1]. In this era, the role of the news media is not only to give the information, but the most importantly to shape public awareness and social values. Especially in the field of

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environmental protection, media reports can quickly strike a chord with the public and stimulate people's thinking and action on environmental issues. As an indispensable part of daily life, the cosmetics industry has gradually attracted people's attention to its impact on the environment.

Recent years there are a lots reports of cosmetic pollution, from the destruction of Marine ecology by microplastic particles to the contamination of soil and water by chemical components. These problems have gradually to let public know, It has attracted wide attention from all walks of life. These reports are not only a statement of facts, but also a supervision and monitoring cosmetics industry. They have prompted a self-examination within the industry to find more environmentally and sustainable ways of producing and doing business. By reviewing existing literature and analyzing news reports, this report aims to reveal the specific impact of cosmetic pollution reports on public behavior. The research finding that these reports significantly changed the public's choice and use of cosmetics. More and more consumers are beginning to care about ingredients and production process of products, and try to choose cosmetics that have less impact on the environment. At the same time, these reports also promote the public's learning and dissemination of environmental protection knowledge, and improve the public's environmental awareness.

In addition, reports of cosmetic pollution have also had a profound impact on related industries. Faced with public doubts and media scrutiny, many cosmetics companies have begun to take actions to improve their production processes and reduce their negative impact on the environment. Some companies have even begun to develop new environmentally friendly materials to replace traditional harmful ingredients. These efforts not only enhance the corporate image of social responsibility, but also lay the foundation for the sustainable development of the entire industry. However, despite some progress, cosmetic contamination remains a serious problem. To further promote the green transformation of the industry, we need more research and exploration to find more effective solutions. This report calls on the government, enterprises and the public to work together to strengthen the supervision and control of cosmetic pollution and promote the development of the industry in a more environmentally friendly and sustainable direction.

Finally, this report emphasizes that public participation and support are very important to addressing cosmetic contamination. Only when everyone is aware of the impact of their consumption behavior on the environment and takes action to reduce this impact can we truly achieve the goal of environmental protection. Therefore, we call on everyone to start from their own, choose environmentally friendly cosmetics, support green production, and jointly contribute to the protection of our beautiful earth home.

1.1 Research Background and status

Now the cosmetics industry is standing in the cusp of development, facing unprecedented opportunities and challenges. The profound change of social background has injected vigorous vitality into this field. With the steady growth of per capita disposable income and the renewal of consumption concept, the cosmetics market has ushered in a rapid expansion, and the consumption trend has shown a strong upward momentum. People's desire for beauty and personalized consumption has made cosmetics an indispensable element in modern life, and its impact on the environment has become increasingly prominent.

The promotion of environmental awareness has become an important symbol of social progress. The public has given unprecedented attention to the environmental friendliness of cosmetics, and more and more consumers are choosing green products that have less impact on the environment. This trend is pushing the cosmetics industry towards a more sustainable direction. The active guidance of national policies has provided solid support for this transformation. The "green low-carbon", "sustainable development", "carbon neutral" and other concepts advocated by the government, as well as the new regulations implemented in the cosmetics industry, are encouraging enterprises to use modern technology and traditional resources to carry out innovative research and development in order to achieve the green upgrading of the industry.

The research on the environmental impact of cosmetics is also deepening. Contaminant studies have revealed the possible toxic effects of certain harmful chemicals in cosmetics, such as aniline, BHA, BHT, triclosan, etc., on aquatic organisms. The potential hazards of these chemicals include genetic mutations and endocrine disruption, posing a threat to the long-term health of the ecosystem. In addition, the problem of microplastic pollution has also attracted great attention from the academic community. Plastic microbeads in cosmetics are difficult to effectively remove in sewage treatment processes and may end up in the food chain, causing a negative impact on the ecosystem.

To address this challenge, researchers have developed a variety of cosmetic wastewater treatment technologies, including coagulation, dissolved gas flotation, adsorption, activated sludge, biodegradation, constructed wetlands, and advanced oxidation processes. The application of these technologies aims to effectively reduce the burden

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of cosmetics wastewater on the environment and promote the sustainable development of the cosmetics industry.

The sustainable development of the cosmetics industry requires not only technological innovation and policy guidance, but also extensive public participation. Consumer preference for green products can drive the market in a more environmentally friendly direction. At the same time, enterprises should actively respond to the policy call, increase investment in research and development, and develop more environmentally friendly, safe and efficient cosmetics. The government and relevant departments should also strengthen the supervision of the cosmetics industry to ensure product quality and environmental safety. In addition, the media and educational institutions also play an important role in raising public awareness of environmental protection. Through publicity and education, more people can understand the potential impact of cosmetics on the environment and guide consumers to make more responsible choices. At the same time, the academic community should continue to deepen the research on the environmental impact of cosmetics, and provide more scientific basis and technical support for the industry.

1.2 Research purpose and significance

As an important part of China's economy, companies have

made a significant contribution to the country's economic development in recent years, but at the same time they have caused huge environmental problems[2]. The specific goals of this study include: first, to identify which ingredients in cosmetics pose an environmental hazard, in particular those chemicals that may be released into the environment during the manufacturing process of cosmetics and their subsequent treatment. Secondly, investigate the specific types of impacts of cosmetic pollutants on ecosystems and human health, and identify the affected objects and the degree of impact. Finally, the environmental impact caused by the cosmetics industry in the process of operation is analyzed comprehensively, and based on this, feasible suggestions and measures are put forward. The significance of research is to promote the sustainable development of society and industry in many ways. First of all, by increasing public awareness of the environmental impact of the cosmetics industry, we can raise consumers' environmental awareness and encourage them to choose more environmentally friendly products, thus contributing to the overall improvement of social awareness. Second, the results of the study will provide guidance for the transformation of the cosmetics industry to a more environmentally friendly and sustainable direction, forming a benign and positive competitive environment. In addition, this study will also promote scientific and technological innovation, encourage the research and development of environmentally friendly materials, and promote technological innovation in relevant industrial sectors, such as the development of degradable packaging materials and the search for natural low-pollution alternative ingredients

2. Literature review

A. "Strengthening Environmental and Health Research to Help Build A Beautiful China": Environmental problems caused by rapid economic development have become increasingly prominent in China, while research shows that a variety of diseases are closely related to environmental pollution. Theoretical and methodological innovation is a challenge and opportunity for environmental and health research in China, and it is necessary to constantly gather and attract outstanding scientists to form a cluster advantage and continue to tackle key problems. Exploring the causes and mechanisms of environmental treatment lays a theoretical and methodological foundation for the research and development of related health protection technologies and the causes of environmental pollution of high incidence diseases in China (Song Maoyong, Jiang Guibin)

B. Emerging contaminants: A One Health perspective: The new contaminants were defined, their history, sources, trends, and effects were systematically described, historical contaminants were described, and sustainable control strategies for the same health were proposed. Call for the establishment of new pollutant environmental risk management information system, the construction of new pollutant toxicology calculation and exposure prediction platform; It also emphasizes the development of strong environmental policies at the regional and global levels to promote the construction of one health.

C. The Impact of Public Participation on Environmental Governance - Empirical Research Based on Ladder Theory: Based on the ladder theory of public participation, this paper selected four types of public participation methods and four types of pollutants, combined with the data of 30 provinces in China from 2008 to 2017, and conducted an empirical test by using panel data regression model. The results show that compared with different types of public participation methods, the effect of public environmental visits on environmental governance is better than that of environmental information disclosure and environmental network public opinion, while the positive effect of the CPPCC proposal and the NPC proposal is not significant. Longitudinal comparison of the effects of different types of pollutants shows that public participation can significantly promote the emission reduction of air pollutants, the impact on noise and solid waste pollution is second,

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but the effect on water pollution is not ideal. It is suggested that the government further optimize and improve the environmental information disclosure mechanism, attach importance to environmental demands at the public level, establish a good interaction mechanism between the public and local ecological and environmental departments, and encourage the public to participate in environmental governance through new media channels.

D. Research Topics and Prospects of Types of Public Environmental Participation: The paper summarizes different types of public environmental participation, including resistance participation, political participation and daily participation. The motivation for public environmental engagement has evolved over time, from obtaining benefits to protecting civil rights and environmental sustainability. Factors influencing public environmental participation include trust, demographic factors, environmental knowledge and risk perception. Public environmental participation is faced with multiple dilemmas of government-led environmental governance model, market failure and the lack of the public's own ability, which can be solved by constructing multi-subject and multi-form environmental governance model.

3. Research process

3.1 Research methods

Questionnaire survey method and comparative research method were adopted in this study, and the combination of the two methods provided a multi-dimensional perspective for the analysis of cosmetic pollution. As a quantitative research method, questionnaire survey collects the information and opinions of the interviewees through the design of questionnaires, which has a high degree of standardization and quantitative characteristics. This method allows researchers to collect data anonymously, increasing the honesty of respondents' responses, while also providing flexibility so that questionnaires can be distributed through multiple channels. However, this method may also have biases, such as non-response bias and question design bias, which require researchers to be careful when designing questionnaires to ensure the accuracy and neutrality of questions.

The application of questionnaire in this study enables researchers to deeply understand the degree of public awareness and concern about cosmetic pollution. Through the collection of data on consumer behavior, the public's attitude and willingness to protect the environment, as well as the public's personal perception of the cosmetic pollution problem, were successfully assessed. In addition, the questionnaire helped identify factors that influence

consumers' choice of environmentally friendly cosmetics, including price, availability and transparency of ingredient information. In addition, by collecting the public's views on existing cosmetics industry policies and regulations and their suggestions for improving these policies and regulations, this provides a basis for the formation of recommendations and strategies aimed at the cosmetics industry, policymakers and consumers.

At the same time, this study also adopts the comparative research method, through the comparative analysis of different individuals, groups, events or concepts, to reveal the similarities and differences between them. This approach is characterized by its ability to uncover differences, discover patterns, and take into account the complexity of the research itself. In the study of cosmetic pollution, comparative research enables researchers to study market trends and understand the changing preferences and market demands of different consumer groups. By comparing cosmetic policies in different countries or regions, researchers can assess the effectiveness of different policies in reducing environmental pollution and learn from them more effective strategies.

3.2 Data collection and analysis

In this study, questionnaire survey was adopted to collect data to explore the impact of reports on environmental pollution caused by cosmetics on the public. The questionnaire design process has been carefully planned to ensure that the required information can be collected efficiently and accurately.

The questionnaire consists of two main parts: introduction and body. The introduction section briefly describes the background, purpose, and importance of the study, while ensuring that participants understand that their participation is voluntary and that the information they provide will be treated confidentially. The main body is the core of the questionnaire and contains multiple questions designed to gather detailed information about the impact of cosmetic pollution related reports on the public. The types of questions include closed questions (such as true or false questions, multiple choice questions) and open questions (such as short answer questions, essay questions) to adapt to different information collection needs. The closing section thanks participants for their participation and provides contact information for follow-up questions or feedback.

Each question has been carefully scrutinized to ensure clarity and pertinence. Closed-end questions are designed to reduce the thinking burden of respondents, while improving data consistency and comparability.

This questionnaire aims to understand the attitudes and

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preferences of the respondents in the process of purchasing and using cosmetics, as well as their awareness and concern about the safety and contamination of cosmetics. By analyzing the results of the questionnaire, consumers' opinions and attitudes on cosmetics brands, prices, ingredient safety, pollutants and safety issues can be revealed, and references and suggestions can be provided for the development and supervision of the cosmetics industry. The questionnaire covers the respondents' basic information, purchasing habits, concern factors, pollutant cognition, safety experience, health impact assessment, willingness to pay extra costs, responsibility allocation and safety improvement suggestions. Through the analysis of the questionnaire results, it is expected to provide consumers with safer and pollution-free cosmetics selection guidelines, and promote the healthy development of the industry.

3.2.1 Characteristics of respondents

The survey results show that the proportion of female respondents is relatively large, accounting for 79.31%, while the proportion of male respondents is only 20.69%. The majority of respondents were under the age of 18, accounting for 77.59%, while the proportion of respondents aged 45 and above was smaller, accounting for only 3.45%. Students are the main identity group, accounting for 81.03%.

3.2.2 Purchasing habits

More than half of the respondents (53.45%) said that they rarely buy cosmetics, and the proportion of respondents who buy cosmetics every quarter is relatively large (18.97%). Skin care products were the most popular type, accounting for 65.52 percent, followed by hair care products and makeup.

3.2.3 Selection factors

When choosing cosmetics, the factors respondents are most concerned about are ingredient safety and effect, 60.34% and 60.34% respectively. Brand and price were also important considerations, at 48.28% and 50% respectively.

3.2.4 Awareness of pollution

More than half of the respondents (56.9%) are aware of possible pollutants in cosmetics, with heavy metals (50%) and hormones (29.31%) being the most concerned pollutants.

3.2.5 Safety issues

63.79% of respondents have stopped using a product due to cosmetic safety issues, and personal safety issues are the main factor. Respondents generally believe that cosmetic pollution has a certain impact on health, of which

34.48% think it is somewhat serious.

3.2.6 Consumption attitude

Most respondents (41.38%) are very willing to pay higher prices for safer and pollution-free cosmetics, and 39.66% are generally willing to pay higher prices.

3.2.7 Responsibilities and suggestions

Respondents believe that the government and cosmetics companies should strengthen supervision and quality inspection to ensure the safety of cosmetics. The recommendations to improve the safety of cosmetics mainly include strengthening the supervision of ingredients, increasing investment in scientific research, and formulating stricter standards.

4. Research results

The study found that women pay the most attention to issues related to the cosmetics industry, while men generally ignore relevant phenomena. Most people can notice the impact of cosmetics on the environment, but the degree of attention needs to be improved. In terms of whether to choose less polluting cosmetics, most respondents would choose that minority groups would think that the efficacy of less polluting cosmetics would be reduced and not choose such cosmetics; In terms of issues related to the cosmetics industry, the high price is one of the most prominent problems. Most participants will pay attention to the unqualified or uneven quality of cosmetics, impulse consumption, and false publicity while ignoring the environmental pollution caused by the cosmetics industry.

4.1 Reporting and public awareness

Environmental issues are closely related to business production and people's lives, and businesses, citizens' groups, environmental protection organisations and other "civil society" groups often play an important role in managing environmental problems and building ecological civilisation[3]. Media plays a crucial role in shaping public awareness of cosmetic contamination issues. The depth and breadth of coverage has a direct impact on the public's understanding of these issues. In-depth and detailed reports can not only reveal the current situation of cosmetic pollution, but also show the scientific principles and social impact behind it, so that the public can have a more comprehensive understanding of the severity and complexity of the problem.

Detailed reports help the public realize that cosmetic pollution is not an isolated phenomenon, but a comprehensive problem involving chemical composition, production process, consumption behavior and even waste disposal.

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Through in-depth analysis, the media is able to show the potential threats of cosmetic contamination to the environment and human health, as well as the multifaceted efforts needed to address these problems.

At the same time, the quality of media coverage is also crucial. High-quality reporting should be based on accurate data and scientific facts and avoid misleading the public. When reports can provide clear explanations, scientific analysis and practical advice, the public's understanding of the cosmetic contamination problem will be more indepth and accurate. For example, reports can explain why certain chemicals are harmful to the environment, or provide advice on how to identify and choose eco-friendly cosmetics.

In addition, the media should also pay attention to the balance of reporting and avoid one-sidedness. When reporting on cosmetic pollution, different voices should be taken into account, including the views of the industry, expert analysis, consumer feedback and the position of environmental organizations. This diversified perspective helps the public to form a comprehensive and objective understanding.

The media should also play their role of education and guidance. Through reporting, the media can inspire the public to think about how to reduce cosmetic pollution by changing consumption habits, supporting green products and participating in environmental protection activities. At the same time, the media can also showcase successful environmental practices and innovative solutions through case studies, special reports and other forms to stimulate the public's environmental awareness and action.

In the digital age, the way media is delivered is constantly evolving. Using platforms such as social media, online forums and mobile apps, media can interact with the public more effectively, gather their opinions and suggestions, and promote public participation and discussion. This interactivity can not only increase the appeal and impact of the report, but also promote continued public attention to the problem of cosmetic contamination.

4.2 Reporting and public acceptance

In-depth media coverage and extensive coverage are the key to the public's understanding of cosmetic pollution. In-depth reporting can penetrate the surface to reveal the scientific principles, environmental impacts, and socio-economic factors behind cosmetic pollution, giving the public a comprehensive understanding of the seriousness and complexity of this problem. Detailed reporting not only presents the current state of the problem, but also explores its causes and possible solutions, thereby raising the level of public awareness.

In the case of environmental issues, much of the public's perception of the risks of climate change comes from media coverage, especially media exposure[4]. However, the quality of media coverage is also critical to public understanding. Quality reporting is based on accurate data and scientific facts, providing clear explanations and practical advice. Such reports can help the public identify harmful ingredients in cosmetics and understand how they enter the environment and affect ecosystems and human health. At the same time, the report's practical advice, such as how to choose eco-friendly cosmetics or how to properly dispose of cosmetic waste, can guide the public to take action to reduce their personal impact on the environment. The media should also pay attention to the multi-dimensional and balanced reporting and avoid the bias that a single perspective may bring. Reports should include voices from different stakeholders, such as cosmetics companies, environmental groups, researchers and ordinary consumers, to show the multifaceted nature of the problem. Such diverse perspectives help the public to form a comprehensive and objective view.

In addition, media reports should be inspiring and encourage the public to participate in the process of solving cosmetic pollution problems. By reporting successful cases and innovative solutions, the media can stimulate the public's environmental awareness and innovative thinking, and promote the exploration and practice of sustainable consumption patterns in society.

In today's digitalization and social media, media communication methods are also constantly innovating. Using interactive platforms such as online forums and social media, the media can communicate more effectively with the public, gather feedback, and promote sustained public attention and in-depth discussion on cosmetic contamination issues.

4.3 Correlation between reporting and public behavior

There is a link between media coverage and public behavior that cannot be ignored. Positive and positive reporting can awaken the public's awareness of environmental protection and inspire them to take practical action. For example, when the media emphasizes the importance of eco-friendly cosmetics brands, consumers may be encouraged to choose products that have less impact on the environment. Similarly, when reporting focuses on the recycling of cosmetic waste, the public may be more willing to participate and contribute to environmental protection. However, this link between media coverage and public behavior is not set in stone. The change of public behavior is a complex process, which not only depends on media

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reports, but also requires the joint action of many other factors. Policy guidance plays a key role in this process, and sound policies can provide clear direction and incentives for the public to adopt more environmentally friendly behaviors. Social and cultural factors should also not be ignored, and a society's general attitudes and values towards environmental protection can profoundly influence individual behavior choices. In addition, personal values are also important factors affecting public behavior, which determines the reaction and choice of individuals in the face of environmental protection issues.

The positive role of media coverage cannot be ignored, but it is also important to recognize that to achieve real behavior change, a multidimensional support system needs to be built. This includes formulating and implementing effective environmental policies, fostering a positive socio-cultural atmosphere, and guiding the public to form correct environmental values. Through such comprehensive efforts, we can more effectively promote the public's environmental behavior and jointly promote the sustainable development of society.

In this process, the role of the media remains crucial. It is not only a disseminator of information, but also an important force in shaping public awareness and behavior. The media should take responsibility to guide the public to realize the importance of environmental protection and encourage them to take practical actions through in-depth, accurate and enlightening reports. At the same time, the media should also pay attention to and report on those individuals and organizations that have made positive efforts in the field of environmental protection, so as to encourage more people to participate in environmental protection actions.

5. Conclusion

The vigorous development of cosmetics industry not only plays an important role in promoting the extension and improvement of related industrial chains, but also has a positive impact on promoting the formation of industrial clusters, providing a large number of employment opportunities and promoting the overall economic growth. In the context of the mature development of the internet nowadays, the media are now talking about the fact that corporate environmental pollution can create public opinion in a short time and have a negative impact on an organisation's image and legitimacy[5]. However, the rapid expansion of this industry has also brought with it

a host of problems, especially inconsistencies in product quality and regulation, which have not only led to environmental pollution and a reduction in biodiversity, but may also pose a threat to human health. The existence of these problems is not only caused by the negligence of regulators or cosmetics companies, but also by the neglect of the public. The public has insufficient awareness of the possible negative effects of the cosmetics industry, and lacks the necessary environmental awareness and consumer responsibility. Therefore, it is particularly important to raise public awareness of the environmental impact of the cosmetics industry and strengthen supervision of cosmetic quality and waste disposal. Governments should also be on the lookout for "fish in the net" that might evade regulation. This means that governments need to establish more effective surveillance mechanisms to detect and deal with companies and individuals who try to circumvent regulations. In this way, the government can ensure that every link of the cosmetics industry meets the requirements of environmental protection and health, thus creating a safer and healthier consumption environment for the public.

Authors Contribution

All the authors contributed equally and their names were listed in alphabetical order.

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