

CHINESE CONSUMERS' EXPOSURE TO WEIBO POSTS,  
AWARENESS, AND BEHAVIORAL TENDENCY  
REGARDING ENVIRONMENTAL ISSUES



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การเปิดรับของผู้บริโภคชาวจีนต่อโพสต์บนเวปไซต์ ความตระหนักและแนวโน้มพฤติกรรมเกี่ยวกับ  
ปัญหาสิ่งแวดล้อม



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TENDENCY REGARDING ENVIRONMENTAL  
ISSUES  
By                                      Miss Xue Gao  
Field of Study                      Strategic Communication Management  
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Accepted by the FACULTY OF COMMUNICATION ARTS, Chulalongkorn  
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ชื่อ เภา : การเปิดรับของผู้บริโภคชาวจีนต่อโพสต์บนเว่ยป้อ ความตระหนักและแนวโน้มพฤติกรรมเกี่ยวกับปัญหาสิ่งแวดล้อม. ( CHINESE CONSUMERS' EXPOSURE TO WEIBO POSTS, AWARENESS, AND BEHAVIORAL TENDENCY REGARDING ENVIRONMENTAL ISSUES) อ.ที่ปรึกษาหลัก : รศ. ดร.วราวรรณ องค์ครุฑรักษา

การวิจัยครั้งนี้มีวัตถุประสงค์เพื่อศึกษาการเปิดรับสื่อบนเว่ยป้อของผู้บริโภคชาวจีน ความตระหนักด้านสิ่งแวดล้อม และ แนวโน้มพฤติกรรมของผู้บริโภคที่มีต่อปัญหาด้านสิ่งแวดล้อม รวมไปถึงศึกษาความสัมพันธ์ระหว่างการเปิดรับสื่อกับความตระหนักด้านสิ่งแวดล้อม และ ความสัมพันธ์ระหว่างความตระหนักด้านสิ่งแวดล้อมกับแนวโน้มพฤติกรรมของผู้บริโภค โดยใช้แบบสอบถามออนไลน์เป็นเครื่องมือในการเก็บข้อมูลจากกลุ่มตัวอย่างจำนวน 200 คน อายุระหว่าง 18 ถึง 59 ปี ที่เคยเห็นโพสต์เกี่ยวกับนิเวศวิทยาและสิ่งแวดล้อมบนเพจของ องค์กรกรีนพีซ (Greenpeace) สำนักงานปกป้องสิ่งแวดล้อม หรือ เพจอื่น ๆ บนเว่ยป้อ ในระหว่าง วันที่ 1 ตุลาคม ถึง 31 ตุลาคม 2021

จากผลการวิจัยชี้ให้เห็นว่าผู้ตอบแบบสอบถามมีการเปิดรับสื่อบนเว่ยป้ออยู่ในระดับกลาง ( $M=2.90$ ) โดยเปิดรับสื่อประเภทข้อความตัวอักษรมากที่สุด ในส่วนของความตระหนักด้านสิ่งแวดล้อม ( $M=3.78$ ) ซึ่งชี้ให้เห็นว่าผู้ตอบแบบสอบถามที่มีการเปิดรับเนื้อหาเพื่อสิ่งแวดล้อมบนเว่ยป้อเห็นด้วยกับปัญหาด้านสิ่งแวดล้อมของประเทศจีนในปัจจุบัน นอกจากนี้ผู้ตอบแบบสอบถามยังมีความเห็นพ้องกันว่าตนมีแนวโน้มพฤติกรรมที่เป็นมิตรต่อสิ่งแวดล้อม ( $M=4.06$ ). ในขณะที่เดียวกัน จากผลการวิจัยพบว่าความตระหนักด้านสิ่งแวดล้อมมีความสัมพันธ์เชิงบวกในระดับต่ำกับการเปิดรับสื่อบนเว่ยป้อ ( $r=0.292$ ) และ ความตระหนักด้านสิ่งแวดล้อมมีความสัมพันธ์เชิงบวกในระดับปานกลางกับแนวโน้มพฤติกรรมของผู้บริโภค ( $r=0.507$ ) ดังนั้น จากผลการศึกษารูปได้ว่า องค์กรเพื่อสิ่งแวดล้อม รัฐบาล หรือ สื่อต่างๆ ที่ต้องการสื่อสารเกี่ยวกับผลิตภัณฑ์และไลฟ์สไตล์ในด้านสิ่งแวดล้อม ควรเพิ่มความน่าสนใจของโพสต์โดยการใช้เนื้อหาและรูปภาพที่น่าสนใจ เพื่อเพิ่มการเปิดรับ ความตระหนัก และ แนวโน้มพฤติกรรมที่เกี่ยวกับนิเวศวิทยาและสิ่งแวดล้อมของผู้บริโภค

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The study's objective is to examine Chinese consumers' exposure to Weibo posts, their environmental awareness, and behavioral tendency regarding environmental issues. This study examines the association between Chinese consumers' exposure to Weibo posts and awareness regarding environmental issues and the relationship between environmental awareness and consumer behavior. An online survey collected data from 200 individuals aged 18 to 59 exposed to Greenpeace, Weibo Environmental Protection, or other ecological posts on Weibo between October 1, 2020, and October 31, 2021.

The findings indicated that respondents have a neutral exposure to Weibo posts ( $M=2.90$ ), with the most exposure to text posts. Environmental awareness ( $M=3.78$ ) suggested that respondents exposed to environmental posts on Weibo agreed with China's present environmental issues. Additionally, respondents agreed that they tend towards green behavior ( $M=4.06$ ). Also, this study discovered a weak positive correlation between environmental awareness and Weibo exposure among Chinese consumers ( $r =0.292$ ). Between environmental awareness and behavioral tendencies, there was a moderately positive correlation ( $r =0.507$ ). Thus, this study implied that some green enterprise, government, or media platforms wishing to promote the concept of green products and lifestyles could enliven future environmental posts with additional exciting text and photos to increase consumer exposure, awareness, and behavioral tendency regarding ecological issues.

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## CHAPTER 1

### INTRODUCTION

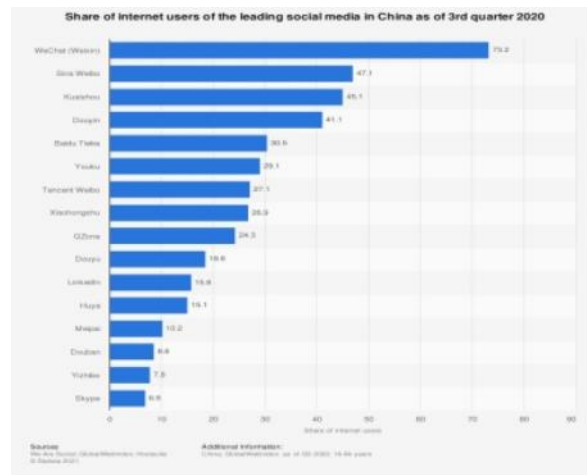
#### 1.1 SIGNIFICANCE OF THE STUDY

##### 1.1.1 China's social media usage

According to Statista (2021), an online statistical data source, China has the world's largest social media market, with approximately 1 billion people utilizing social media platforms. The global agency We Are Social and Hootsuite's annual digital insight report *Digital 2021: China* points out that China's population is approximately 1.44 billion people as of January 2021, and the number of people who use social media in China is approximately 64.6% of the total population (We Are Social, 2021). While Facebook, YouTube, and Twitter are forbidden in China, two Chinese social media giants, Weibo and WeChat, dominate Chinese society, where the Chinese increasingly exchange information and engage with others (Gentlemen Marketing Agency, 2021).

The study focuses on Weibo, China's second leading social platform as of the 3rd quarter of 2020, with 520 million monthly active members, and can be thought of as a hybrid of Facebook, Twitter, and Instagram (Statista, 2021). Compared to WeChat, China's most popular social network, the Chinese utilize Weibo to find news and information from trustworthy sources, discuss experiences, and organize events. Besides, Weibo makes it easier to spread the news to a large target audience than WeChat (Teamcrew, 2015).

Figure 1.1 Share of internet users of the leading social media in China as of 3rd quarter 2020



Source: Statista. (2021, July 28). *Most popular social media in China Q3 2020*.

Retrieved November 13, 2021, from

<https://www.statista.com/statistics/250546/leading-social-network-sites-in-china/>

Additionally, Liu and Zhao (2016) observed that Individuals, media, governments, corporations, and environmental non-governmental organizations are the five categories of accounts on Weibo posting environmental problems (2016). 'Greenpeace' and 'Weibo Environmental Protection' are two of the most popular Weibo pages for consumers to become aware of environmental issues, with posts consisting of text, photos, and videos, due to their large following and high level of consumer interaction (Ji, Harlow, Cui, & Wang, 2018). Additionally, with 1.1 million followers, 'Greenpeace' is the official Weibo page of China's most prominent environmental non-governmental organization, and 'Weibo Environmental Protection' is the official Weibo page for environmental issues, with 1.9 million followers.

### 1.1.2 China's environmental awareness and behavioral tendency

With the growing popularity of environmental issues and sustainable development worldwide, eco-friendliness has emerged as the dominant trend. China has amended its national development policy to address climate change and build a low-carbon economy, reflecting its concern about environmental deterioration. Given the country's global impact, the cornerstone of China's development of a low-carbon economy is strengthened by improving environmental awareness (Guo & Marinova, 2011). China is currently confronted with seven significant environmental issues (CareOurEarth, 2020).

1. Air pollution: It is a significant public health issue in China. In recent years, China's hazardous and dense smog has frequently affected a wide variety of towns and cities at various times and locations and mainly created as a byproduct of industrial and vehicular pollution.

2. Water Pollution: Nearly 90% of urban groundwater and 70% of China's rivers, lakes, and oceans are polluted due to the dumping of hazardous industrial waste and pollutants on land, as well as oil spills and other marine operations.

3. Soil Pollution: Contaminated water and solid waste have affected numerous farmed areas, resulting in increased soil pollution and land degradation.

4. Deforestation: Due to many urbanization projects, China has one of the world's most scarce forest resources, leading to geomorphic disasters and a significant loss of China's biodiversity.

5. Biodiversity loss: Between 15% and 20% of species in China are currently endangered due to human activities and practices such as deforestation and the proliferation of invasive land and aquatic species.

6. Energy loss: China's economic expansion has elevated the country to the world's most significant user of primary materials, and increasing industrialization and entrepreneurship have resulted in a chronic energy deficit.

7. Climate change: It is a result of the use of electrical refrigerants and car exhaust in residences.

Furthermore, Chinese consumers know that, while they are becoming wealthier, their quality of life is deteriorating from an environmental standpoint (Grumbine, 2014). According to the China Sustainable Consumption Research Report, in 2017, 50% of Chinese customers were willing to spend an extra 5% -10% on China's environmental protection products, and this proportion increased to 80% in 2019. (Daxue Consulting, 2020). Beijing BellaTerra Consulting's survey finds that more than half of people under 35 are becoming more aware of environmental issues, and young customers are becoming more environmentally conscious (Cheung, 2021) (Cheung, 2021) (Cheung, 2021). As a result, sustainability and environmental friendliness are becoming increasingly essential to Chinese customers, and consumers expect businesses to deliver environmentally friendly products and services (Cheung, 2021).

The purpose of this study is to investigate the relationship between Chinese consumers' exposure to Weibo posts, awareness, and behavioral tendencies regarding environmental issues in order to understand better how to use Weibo, an essential platform for environmental information dissemination, to raise consumer awareness of environmental issues and provide constructive suggestions for the environment and green products.

## 1.2 Research Objectives

1. To study Chinese consumers' exposure to Weibo posts, awareness, and behavioral tendency regarding environmental issues
2. To study the relationship between Chinese consumers' exposure to Weibo posts and their environmental awareness regarding environmental issues
3. To study the relationship between Chinese consumers' environmental awareness and their behavioral tendency

## 1.3 Research Questions

1. How are Chinese consumers exposed to Weibo posts, environmental awareness, and behavioral tendency regarding environmental issues?
2. Is there a relationship between Chinese consumers' exposure to Weibo posts and their environmental awareness regarding environmental issues?
3. Is there a relationship between Chinese consumers' environmental awareness and their behavioral tendency?

## 1.4 Scope of the Study

This study conducted a quantitative survey of respondents to elicit data on Chinese consumers' exposure to Weibo posts regarding environmental issues, awareness, and behavioral tendencies. The questionnaire primarily examines three concepts: consumers' exposure to Weibo posts regarding environmental issues, environmental awareness, and behavioral tendencies. As a result, the questionnaire contains five sections: screening, demographic statistics, consumers' Weibo use regarding environmental issues, environmental awareness, and behavioral tendency.



The study examines 200 individuals in China between the ages of 18 to 59. The reason for selecting this sample is that, according to the Digital 2021: China report, the age range of these respondents corresponds to that of active Chinese social media users, and hence this study employed that age range (We Are Social, 2021). Descriptive statistics was used for screening and demographic questions, while five-point Likert scales were used for the others. During mid-October to mid-November 2021, the questionnaire was translated into Chinese and distributed via China's online voting platform WJX. The sampling technique used is purposive sampling, which enables researchers to choose individuals who are followers of Weibo pages 'Greenpeace' or 'Weibo Environmental Protection'. SPSS evaluated 200 samples following data collection. Additionally, this study must validate the scale's validity and reliability based on the data collected.

### **1.5 Operational Definitions**

#### **Chinese consumers' exposure to Weibo posts and the content regarding the environment**

Consumers' exposure to specific media and information can be comprehended through self-report, broken down into content recalled by consumers, frequency, and duration of attention to detailed information (De Vreese & Neijens, 2016). This study aims to explore Chinese consumers' exposure to Weibo posts about environmental issues. As such, this study refers to environmental protection posts on Weibo in the form of text, photos, and videos published by 'Greenpeace' and 'Weibo Environmental Protection' as well as other Weibo posts about environmental news, green environmental protection product innovation, and daily environmental behavior proposed by individuals with exceptional environmental stewardship. Therefore,

Chinese consumers' exposure to Weibo postings about environmental concerns is quantified by their frequency and duration of exposure to text, photo, and video posts regarding environmental issues.

### **Consumers' environmental awareness**

Environmental awareness reflects people's concern for the environment and their ability to comprehend the impact of their conduct on the environment, which is a critical first step in preparing people to tackle environmental problems (Ramsey, Hungerford, & Volk, 1992). This study aims to assess Chinese consumers' environmental awareness following exposure to environmental-related posts on Weibo. The poll can determine whether these customers are aware of environmental issues and willing to make personal efforts to resolve them due to exposure to the environmental information on Weibo. According to CareOurEarth (2020), consumer knowledge of China's seven most critical environmental concerns is air pollution, water pollution, soil pollution, deforestation, biodiversity loss, energy loss, and climate change.

### **Consumers' environmental behavioral tendency**

Fu et al. (2020) define the environmental behavioral intention as consumers' willingness to encourage sustainable (green) habits by decreasing or eliminating negative environmental impacts. Environmental behavior tendencies can be classified into four categories: resource and energy use, transportation, green product consumption, and recycling and reuse (Fu et al., 2020). The study divides environmental behavioral tendencies into the following categories based on various similar investigations.

1. Conserve energy and resources: Reduce your reliance on water and electricity.
2. Transportation: Option for low-carbon modes of transport.
3. Recyclable materials include paper, plastic bottles, and glass.
4. Make use of reusable items such as cups and shopping bags.
5. Dispose of non-recyclable material properly and separate it from recyclable waste.
6. Pay attention to and promote green products and brands.
7. Inspire family and friends to adopt an Eco-friendlier lifestyle and advocate for environmental protection.

### **1.6 Benefit of the Study**

1. Identify the sorts of posts on environmental issues that Chinese consumers are exposed to on Weibo and determine whether these posts increase their awareness of the environmental problems, hence establishing a green behavior tendency.
2. Analyzing and summarizing study data to understand how to utilize China's social media platforms to promote environmental protection concepts and raise environmental awareness. Then it can provide constructive suggestions to the green product market and relevant government agencies responsible for environmental protection, developing a green environmental marketing communication strategy and effective information dissemination, and increasing the high engagement of Chinese consumers.

## CHAPTER 2

### LITERATURE REVIEW

This chapter primarily discusses the factors included in this research design, including media exposure, environmental awareness, and the behavioral tendency of Weibo users who are exposed to Weibo posts regarding environmental issues. Additionally, it offers explanations of the sorts and contents of environmental posts on Greenpeace's and Weibo Environmental Protection's main Weibo accounts.

1. This chapter defines media exposure, explains the Weibo page and its many content kinds, and discusses the content of environmental posts on 'Greenpeace' and 'Weibo Environmental Protection' accounts.
2. Consumers' awareness of environmental protection and the current state of China's environmental challenges.
3. The environmental behavior tendency of Chinese customers, green marketing, and green consumers.
4. Additionally, related studies are reviewed.
5. This chapter summarizes the study's conceptual framework.

#### **2.1 Exposure to Weibo Posts**

##### **2.1.1 Media Exposure**

Schultz and Zelezny (1998) defined *media exposure* as an opportunity for readers, viewers, or listeners to see or hear advertisements on a specific media carrier. Later in 2004, Slater (2004) considered media exposure as to how the audience contacts specific information content or media category. He believes that 'exposure' refers to a person seeing the information but not stressing the importance of remembering it.

However, remember that the exposure may also affect the audience's cognitive, emotional, or behavioral states even if the information is incomplete. Although most of the effects discussed in this section are minor, their effectiveness is due to the repetition of many exposures, which means that long-term exposure to a specific sort of media and information can help affect public perceptions, attitudes, and behaviors.

The most potent effect of media exposure is that it rapidly spreads knowledge to many audience members. However, to a certain extent, the success of the communication process is mainly dependent on the quality of the platform offering information and the frequency of exposure, so at the right time, using a suitable social platform for multiple contacts with specific information can significantly influence consumer preference. At least three exposures are required in this scenario for the information to be practical (Andrews & Shimp, 2017). Solomon (2015) noted that exposure happens when stimulus enters the sensory receptor range of an individual. It can refer to the number of times a person is exposed to information and maintains attention on the stimuli. Wang and Cai (2018) assert that social media is distinct from traditional media exposure, characterized by two-way communication. The rise of social media has facilitated the spread of contingency stimulus information experiences. Media users often choose to receive media content to satisfy their pleasure or utility needs, and then the audience can repost posts of interest to other users and the public media via the repost function.

The majority of scholars feel that the media is essential in extensively distributing environmental concerns. The frequency and durations of media coverage of environmental disasters and conflicts contribute to transforming numerous minor issues into significant public issues (De Vreese & Neijens, 2016). According to J. Lee

and Cho (2019), exposure refers to the amount of media heard or seen for a particular piece of information (such as environmental protection, health issues, and political issues). The individual can gain a better grasp of social problems and hence be influenced to engage in particular actions connected to social problems due to this media exposure. For instance, audiences exposed to environmental information are more likely to believe in the importance of environmental values (such as biosphere values), to possess mature environmental knowledge, and to have a favorable attitude toward environmental protection. As a result, such consumers are more likely to engage in environmentally conscious behavior.

While media consumers can obtain information from various media outlets, their perceptions of the content produced by each outlet vary. While the communication's content may be identical, people may react differently to the same message depending on its presentation in various media. When consumers view media as highly credible sources of information, they are more likely to believe it, resulting in cognitive shifts in attitudes and behaviors. As a result, the adequate media exposure for sustainable development firms and green brands typically requires selecting relevant media channels and content categories. Marketers attempt to improve exposure to such customer groups by utilizing various pro-environmental communication cues for corporate sustainability, such as nature imagery, celebrity endorsements, and attention-grabbing advertising features, to assist consumers in paying attention to messaging (J. Lee & Cho, 2019).

### 2.1.2 Weibo

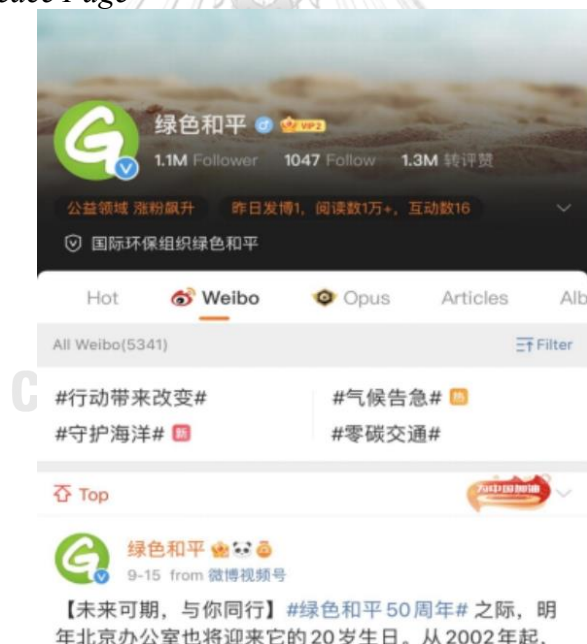
Globally, social media usage is exploding. Despite its lack of access to foreign social media platforms like Facebook, INS and Twitter, China remains the world's largest social media market, with approximately 1 billion users (Statista, 2021). Weibo is one of China's most popular social media networks, with over 46.3 million daily active users, including over 37,000 media organizations, 130,000 businesses, and 170,000 government institutions (We Are Social, 2021). While Weibo has been compared to a cross between Twitter and Facebook, its success is largely due to its prominence as the third-largest source of information for Chinese internet users and as a critical platform for information dissemination. Consequently, an increasing number of ENGOs utilize Weibo to foster the development of a sustainable society. For example, Weibo has evolved into a major platform for environmental non-governmental organizations to discuss pollution-related concerns and mobilize individuals (Ji et al., 2018). Liu and Zhao (2016) discovered that Weibo encourages public debate on global warming and is utilized by environmental non-governmental organizations to advocate climate-related measures.

Sukosd and Fu (2013) discovered that Weibo was more social than Twitter's early version of network, application, and multimedia choices. On the page of the Weibo platform, various sorts of information can be published, the most common of which are text, image, and video. There are two sorts of text: posts with a maximum of 280 Chinese characters and user-written articles, which allow internet users to sponsor publications. Simultaneously, users can publish videos, pictures, or links to external web pages. Users can subscribe, retweet, comment, and like on Weibo.

In comparison to other social media platforms, Weibo appears to be an appropriate online communication medium for public discussion due to its open nature and the fact that it is not restricted to a single user's social network. Weibo minimizes the value of internet users' pasts and establishes Weibo as a place for public discussion. It allows for great self-expression and invites citizens to participate in conversations and make comments on topics of interest. Apart from its rapid transmission of information and impact on Chinese Internet users, Weibo can gather sufficient text analysis data.

### 2.1.3 Greenpeace Posts

Figure 2.1 Greenpeace Page



Source: Greenpeace (2021). Greenpeace Page. Retrieved November 13, 2021,  
from <https://weibo.com/u/1292378751>



Greenpeace (Figure 2.1) is one of the first non-governmental international environmental protection organizations to officially register on Weibo, aiming to promote positive changes in the Chinese public's green behavior by effective measures to defend the natural ecosystem and global peace. It has more than 1.1 million followers on Weibo. As a result, it has become the non-governmental international organization with the most fans in China (Ji et al., 2018).

Greenpeace China Weibo has been actively involved in several environmental issues over the past few years, attracting wide public attention. According to research and analysis, most of the articles, pictures, texts, and videos related to environmental issues posted on Greenpeace Weibo pages reflect the severe environmental situation in China (Ji et al., 2018). Pictures, videos, and texts are the three main types of posts posted on Greenpeace's Weibo page. Examples of these posts are shown in Figure 2.2-2.4.

Figure 2. 2 Photo and text post on Greenpeace Page



Source: Greenpeace (2021). Greenpeace Page. Retrieved November 13, 2021, from

<https://weibo.com/u/1292378751>

Figure 2. 3 Multiple photos Post on Greenpeace Page



Source: Greenpeace (2021). Greenpeace Page. Retrieved November 13, 2021,  
from <https://weibo.com/u/1292378751>

Figure 2. 4 Video Post on Greenpeace Page



Source: Greenpeace (2021). Greenpeace Page. Retrieved November 13, 2021, from <https://weibo.com/u/1292378751>

### 2.1.4 Weibo Environmental Protection Posts

Figure 2. 5 Weibo Environmental Protection Page



Source: Weibo Environmental Protection (2021). Weibo Environmental Protection Page. Retrieved November 13, 2021, from <https://weibo.com/u/5754133643>

Weibo Environmental Protection Page (Figure 2.5) is the official Environmental Protection account of Sina Weibo, which is in line with the concept of Environmental awareness of social media. The purpose of this official account is to jointly promote and expand environmental issues with UNEP to raise Chinese people's awareness of environmental protection. Therefore, most posts on the environmental protection page of Weibo are mainly about the protection of the world's Wild animals, which is in line with UNEP's Wild for Life activities (Guo, 2017). The posts on this page also appear as photos, videos, and text, so figure 2.6- Figure 2.8 shows examples of these posts.

Figure 2. 6 Photo and text post on Weibo Environmental Protection Page



Source: Weibo Environmental Protection (2021). Weibo Environmental Protection

Page. Retrieved November 13, 2021, from <https://weibo.com/u/5754133643>

Figure 2. 7 Multiple photos Post on Weibo Environmental Protection Page



Source: Weibo Environmental Protection (2021). Weibo Environmental Protection

Page. Retrieved November 13, 2021, from <https://weibo.com/u/5754133643>

Figure 2. 8 Video Post on Weibo Environmental Protection Page



Source: Weibo Environmental Protection (2021). Weibo Environmental Protection Page. Retrieved November 13, 2021, from <https://weibo.com/u/5754133643>

The questionnaire for this research study's online survey is based on these views about media exposure to Greenpeace posts and Weibo Environmental Protection posts.

## 2.2 Environmental Awareness

Environmental awareness indicates a correlation with people's concern for environmental issues. To a certain extent, environmental awareness refers to an understanding of environmental issues such as waste, pollution, greening, and endangered animal preservation (Li et al., 2020). Environmental awareness is a



combination of knowledge, attitudes, and concern that is demonstrated via action. Therefore, before understanding environmental awareness, it is necessary to be aware of the country's and the world's environmental challenges. As a result, environmental awareness must be fostered through education about the critical nature of environmental protection. Through available resources such as seminars, training, online courses, books, articles, videos, brochures, and media material, the socialization process can increase public knowledge of environmental protection (Ham, Mrcela, & Horvat, 2016). Ari and Yilmaz (2017) believe that environmental awareness motivates individuals to adopt environmentally friendly behaviors that lead to sustainable pollution reduction, such as consuming recyclable and environmentally friendly products, participating in environmental activities and projects, and purchasing products from environmentally sustainable businesses.

According to certain prior studies, the phrase "environmental awareness" encompasses a multifaceted structure. Environmental knowledge, concerns, and attitudes are the three components of environmental awareness that are usually addressed, and these components are thought to interact (Kollmuss & Agyeman, 2002). Increased environmental awareness and attention may result in changes in individual behavior (Michalos, Creech, McDonald, & Kahlke, 2010). Environmental knowledge involves all factual information about environmental issues, classifications, legislation, and operational knowledge regarding environmental skills and activities (Schahn & Holzer, 1990). It is widely believed that increased awareness of environmental protection may increase the intention to act in support of environmental protection because people must first understand the needs of the environment and the urgency and importance of advocating for a green lifestyle before acting in support of environmental

protection (Raymond et al., 2010). Examine the positive relationship between environmental awareness and environmentally responsible behavior, such as recycling, and the relationship between environmental concern and an interest in renewable energy, such as making daily schedule sacrifices and purchasing organic food and environmentally friendly products (Grunert, 1993).

China officially became the world's most significant greenhouse gas emitter in 2017 due to environmental degradation. Its natural environment has deteriorated significantly. China's national development strategy has shifted in recent years to address climate change and transition to a low-carbon economy, considering the global impact of its economic expansion. The foundation for establishing a low-carbon economy is a demanding environmental education system and widespread environmental consciousness (Guo & Marinova, 2011). Environmental non-governmental groups are rapidly playing a distinctive and essential role in China's environmental education and awareness. Harris (2006) believes that China has made significant progress in managing environmental change and that it is necessary to strengthen environmental education and awareness properly. As a result, government entities, academic institutions, non-governmental organizations, and media platforms are all contributing to this shift by launching environmental education and awareness campaigns regarding carbon reduction.

According to CareOurEarth (2020), China's most pressing environmental challenges include air pollution, water pollution, soil pollution, deforestation, biodiversity loss, energy loss, and climate change. This study aimed to investigate consumers' environmental awareness following exposure to environmental posts on

Weibo to see whether they were aware of environmental issues and persuaded to change their behavior to relieve these issues.

According to CareOurEarth (2020), China's most pressing environmental challenges air pollution, water pollution, land pollution, deforestation, species extinction, energy dissipation, and global warming. This study aimed to investigate consumers' environmental awareness following exposure to environmental posts on Weibo to see whether they were aware of environmental issues and persuaded to change their behavior to relieve these issues.

## **2.3 Environmental Behavioral Tendency**

### **2.3.1 Green Marketing**

Through its eco-marketing seminar in 1975, the American Marketing Association created the term "green marketing." Green marketing, often referred to as environmental marketing, ecological marketing, social marketing, and sustainable marketing, is a company's endeavor to create, advertise, price, and distribute products in a manner that promotes environmental protection (Polonsky, 2011). Green marketing encompasses all actions developed and marketed to meet the wants and ambitions of consumers to cause the least amount of harm to the natural environment possible (Polonsky, 2011). Green marketing can be the result of an organization's or a consumer's initiative. On the one hand, businesses choose and implement green marketing strategies, and consumers respond to green marketing tactics through their purchasing behaviors. Consumer demand for green products has increased, and green marketing firms are attempting to fill the need in the market through methods (Gouvea, Kassicieh, & Montoya, 2013).

Although there is no universal definition of green marketing, one defining characteristic is the deliberate inclusion of environmental consciousness into marketing management. Extensive research has demonstrated an increase in awareness of green issues over the years due to increased knowledge about environmental stewardship; increased enterprise green advertising; growing concern for the environment; and the growing popularity of green products promoted by social and environmental charities. The widespread increase in consumer knowledge of environmental issues has prompted businesses to "go green" by introducing the concept of corporate environmentalism (Banerjee, Iyer, & Kashyap, 2003).

In China, green marketing results from a collaborative effort between the government, media organizations, and private individuals. Given China's environmental concerns (Grumbine, 2014), Chinese consumers recognize that, despite their growing income, their environmental quality of life has deteriorated. For these and other reasons, businesses face increased consumer and social pressure to make their products and operations more environmentally friendly (Zhu, Sarkis, & Lai, 2012). China and worldwide examined social transformation, as well as the evolution of financial industries and marketplaces. These pressures may have a detrimental effect on China's progress and the world economy as a whole. For instance, Haier, a prominent appliance manufacturer and one of China's first worldwide brands, is assisting in advancing green industrial practices. Its co-sponsored important international sporting events in 2008, producing a new image of the "Olympic green sponsor." Haier has made a public commitment to environmental sustainability and energy efficiency and has successfully marketed this effort (Watts & Noh, 2014).

Green marketing necessitates collaboration between businesses, organizations, government, and the media to disseminate environmental knowledge and information and prioritize environmentally friendly product and service commitments. Thus, increasing public awareness of green consumption and focusing attention on the environment can ultimately result in a shift in consumer behavior on a long-term environmental protection level (Zhu & Sarkis, 2016).

### **2.3.2 Green Consumer**

Green customers favor things that are unlikely to harm human health or the environment (Xie, Bagozzi, & Gronhaug, 2014). The term "green consumer" refers to an individual capable of avoiding behaviors that harm organisms, degrade the environment, consume a vast amount of non-renewable energy, or conduct unethical testing on animals or humans during the manufacturing or usage of products (Elkington, 1994). Concern for the environment has developed a specialized industry of consumers named "green consumers." Green customers are frequently referred to as "pro-environment" since they are concerned with physical surroundings such as air, water, and land (Shrum, McCarty, & Lowrey, 1995). According to researchers, the green consumer is the primary driver of green consumerism, and green consumerism can be thought of as a green consumer's self-identity. Green consumers consist of environmental awareness, green product consumption, and a green way of life. These three categories comprise a typical green consumption scale (Zhu & Sarkis, 2016).

China is fast becoming a green consumer society on a large scale. In China, as disposable income increases, demand for organic and green foods is surging (Cheung & To, 2019). More young customers are ready to purchase eco-friendly items, and their

health and environmental consciousness impact their purchasing of green products (Rana & Paul, 2017). Cheung and To (2019) discovered a positive association between age and environmentally friendly consumption in China. Olds are more likely to engage in consumption and recycling behaviors and encourage younger groups to do so. Since green products are often more expensive than conventional items, high-income individuals may be more willing to purchase them due to the related marginal cost rise. Meanwhile, because high-income Chinese consumers are hesitant to put their interests aside for the collective interests, they score relatively low on use and recycling behaviors.

According to a marketing scholar, Chinese customers are less likely to pay a premium for eco-friendly items but are willing to pay a slight premium of 4.5 percent above the base price for eco-label products (Chan, 2000). Green products with a higher environmental value typically have transparent eco-labels that detail green specs and ingredients. These labels tell consumers about their products' environmental impact (Taufique, Siwar, Talib, Sarah, & Chamhuri, 2014). According to Chan (2000), ecological labels provide consumers with such authentication information retrieval methods. With that information, consumers can quickly solve environmental externalities and believe that green products can provide different human and environmental health benefits for the future society. Consumers understand that the long-term benefits are more significant than the short-term benefits.

### 2.3.3 Environmental Behavior Intention

The term "behavioral intention" refers to the desire to engage in a behavior. The theory of planned behavior (TPB) states that intention reflects the motivating variables that impact particular conduct (Ajzen, 1991). Individuals are deemed inclined to pursue ecologically beneficial behavior when they have congruent goals. Hines, Hungerford, and Tomera (1987) created a model of environmental behavior that emphasizes the primary predictor of pro-environmental action as behavioral intention. Fu et al. (2020) hypothesized that environmental attitude, concern and knowledge, three components of environmental awareness, could influence pro-environmental behavior indirectly via behavioral tendency, and their research presented a correlation between environmental awareness and pro-environmental behavioral tendency.

Numerous past studies have explored environmental issues resulting from human activity (Koger & Winter, 2010). Human behaviors aimed at protecting the environment are referred to in these research as "environmentally friendly behavior," "green behavior," or "low-carbon conduct." Pro-environmental behavior is described as an intentional effort to mitigate the detrimental influence of human behavior on nature and the built environment (Kollmuss & Agyeman, 2002). According to Steg and Vlek (2009), pro-environmental behavior refers to the activity unharmed to the environment or even advantageous to it.

Supporting surroundings exhibit a range of behaviors and are categorized accordingly. Stern (2000) classified pro-environmental behaviors into two categories: personal and public (discussing environmental issues and encouraging people to participate in pro-environmental activities). Personal environmental practices include recycling (e.g., reusing paper and plastic), conserving energy (e.g., conserving water

and electricity), reusing (e.g., shopping bags), low-carbon travel via public transportation, appropriately sorting non-recyclable waste, and purchasing green items. Pro-environmental public behaviors include debating environmental concerns, advocating for pro-environment policies, and encouraging family and friends to participate in pro-environmental activities via social media. Additionally, Fu et al. (2020) noted that pro-environmental behavior can be defined as promoting participation in sustainable (green) actions that reduce or eliminate negative environmental impacts. For example, transportation, low-carbon modes of mobility, resource and energy recycling, and green purchasing.

#### **2.4 Related Research**

There was research done in 2020 on the relationship between product attributes, environmental awareness, and eco-label-based purchasing behaviors of Chinese Generation Z customers. The research subjects are Chinese Generation Z consumers, and the samples are college students from Beijing and Anhui universities. This research investigates and analyzes the relationship between eco-label, product attributes, environmental awareness, and green purchasing behavior. The findings reveal that eco-label-based purchasing behavior considerably increases product attribute cues, which positively mediates eco-label-based and environmental awareness and ultimately leads to Generation Z purchasing behavior in China. It has been shown that the green product purchasing behavior of Chinese Generation Z customers is predicted and guided by their concern for environmental development (Song, Qin, & Qin, 2020).



A study on the relationship between environmental awareness and pro-environmental behavior of road freight transportation drivers in China was conducted in 2020, and it discussed the effect of four major components of environmental awareness on pro-environmental behavior, namely, environmental concern, environmental attitude, environmental knowledge, and behavioral intention to motivate road freight transportation behavior. 243 Chinese truck drivers were chosen as samples for this study. The findings indicate that environmental concerns, attitudes, and knowledge influence pro-environmental conduct indirectly via behavioral intention and that there is a relationship between environmental awareness and pro-environmental behavioral intention (Fu et al., 2020).

A study explored exposure to environmental Facebook pages, environmental awareness, and behavioral tendencies in Thailand in 2020. The study examines the relationships among Facebook page exposure, consumer environmental awareness, and behavioral tendencies. The sample is obtained from 200 Thai respondents aged 19 to 64. According to the findings, there is a relationship between Thai consumers' environmental awareness and behavioral tendencies. The findings, however, do not support a link between consumer exposure to Facebook environmental pages and environmental awareness (Jakmongkolchai, 2020).

Linh Nguyen (2018) conducted a study to investigate the relationship between the motivation for environmental issues, environmental awareness, and behavioral inclinations of Facebook users in Vietnam. The goal of this study was to examine the motivations, environmental awareness, and behavioral intentions of Vietnamese Facebook users toward environmental issues and the link between these three variables.

Three well-known Facebook Influencers were questioned about their eco-friendly lifestyles. Participants in the study ranged in age from 18 to 45 years and were currently residing in Vietnam. The findings indicate that respondents have a favorable view of Facebook users' environmental motivations, a favorable attitude toward environmental awareness, and a favorable attitude regarding their behavioral tendencies, with a high level of care for brand alignment with environmental behaviors. In terms of the link between factors, the research findings indicate that the motivational for environmental issues of Facebook users are positively correlated with respondents' environmental awareness, which is favorably correlated with respondents' behavioral tendency.

In 2016, a study investigated climate change posts on Weibo, the sorts of posts, public awareness of climate change, and the relationship between the three. During November and December 2015, they collected Weibo posts about climate change and the content and activity status of the public who reposted these Weibo posts and used data analysis to determine whether these various types of Chinese citizens have developed awareness about climate change. The findings indicate an indirect relationship between public environmental awareness and exposure to environmental posts on Weibo, mainly determined by the type of post speaker and the audience receiving information (Liu & Zhao, 2016).

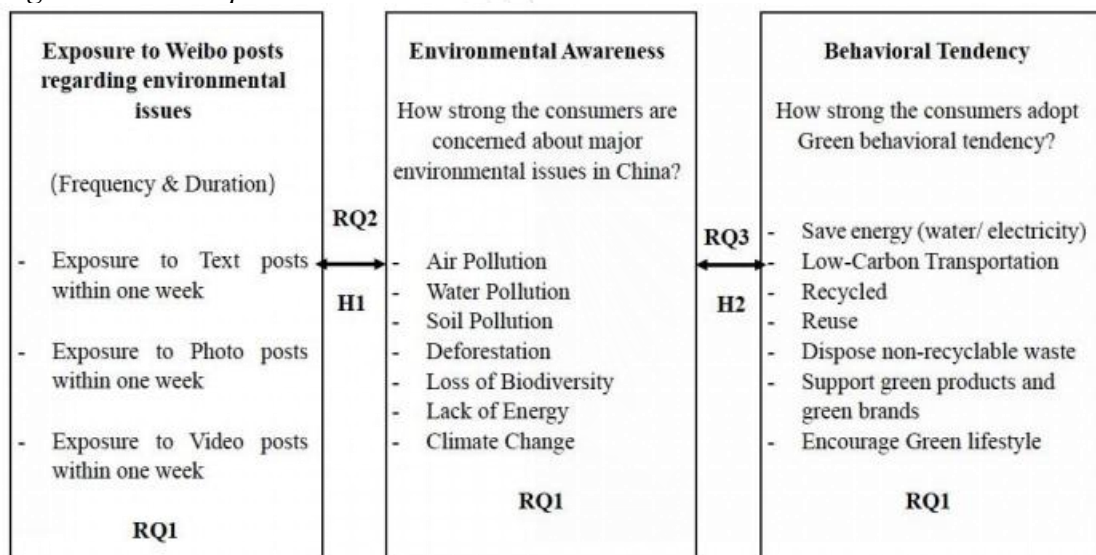
The research listed above is used in this study to investigate and determine whether there is a relationship between Chinese consumers' media exposure rate of Weibo postings about environmental issues, Chinese consumers' environmental awareness, and behavioral tendency. Figure 2.9 illustrates the conceptual framework of this research.

## 2.5 Research Hypothesis

1. There is a relationship between Chinese consumers' exposure to Weibo posts and their environmental awareness regarding environmental issues
2. There is a relationship between environmental awareness and behavioral tendency.

## 2.6 Conceptual Framework

Figure 2. 9 Conceptual Framework



## **CHAPTER 3**

### **METHODOLOGY**

Our research is based on quantitative methods and aims to explore Chinese consumers' exposure to environmental posts on social media Weibo, their environmental awareness and behavioral tendencies. The purpose of this study is aimed at the relationship between media exposure and environmental awareness and the relationship between environmental awareness and behavioral tendencies.

Online questionnaires are used as research tools to collect data. This chapter introduces in detail the methods used in this study, including the research sample and sampling method, research instrument, the questionnaire, variable measurement, data collection, and data analysis.

#### **3.1 Research Methodology**

A quantitative method is used in this study to distribute an online questionnaire to 200 Chinese aged 18 to 59 who are followers of 'Greenpeace' or 'Weibo Environmental Protection' and exposed to Greenpeace, Weibo Environmental Protection posts about environmental issues during October 1, 2020, to October 31, 2021.

Greenpeace is one of the first international environmental non-governmental organizations to register on Weibo. It is dedicated to encouraging good improvements in green public behavior and has over 1.05 million Weibo followers (Greenpeace, 2021). Weibo Environmental Protection is Sina Weibo's official account for environmental protection, which intends to promote and grow environmental issues in collaboration with United Nations Environmental Protection to enhance Chinese

people's awareness of environmental protection. This account has 1.9 million followers as of September 2021 (Weibo Environmental Protection, 2021).

### **3.2 Population and Sample**

The data were collected from 200 respondents aged 18 to 59 who are followers of Weibo account 'Greenpeace' or 'Weibo Environmental Protection' and exposed to Greenpeace and Weibo Environmental Protection or other environmental-related posts. The sample number of 200 is based on another similar research report, which provides a basic understanding of the relationship between variables (Jakmongkolchai, 2020). According to the global agency We Are Social (2021), the annual digital insight report *Digital 2021: China* implies that the most active Weibo users are between the ages of 18 and 59.

### **3.3 Sampling Techniques**

The sampling technique of this study is non-probability, purposive sampling, which enables the researchers to choose participants. Online surveys are provided to Weibo users aged 18-59 who are followers of Weibo account 'Greenpeace' or 'Weibo Environmental Protection' and exposed to these two account posts regarding environmental issues during October 1, 2020, to October 31, 2021.

### **3.4 Research Instruments**

The data for this study were delivered via WJX, a Chinese online questionnaire platform. The questionnaire consists of 26 items, including screening questions; it is separated into five sections: screening, exposure to Weibo environmental issues,

environmental awareness, behavioral tendency and demographic statistics. The individuals were asked to select the response that was most consistent with their awareness and behavioral tendency on the 5-point Likert scales, ranging from "strongly disagree" to "strongly agree." Additionally, samples were gathered at a frequency of 5 (everyday) to 1 (less than once) and duration of 5 (more than 15 mins) to 1 (less than 1 min) from Greenpeace, Weibo Environmental Protection, and other Weibo posts.

The five parts of the questionnaire are as follows:

### **Section 1: Screening Questions – 3 questions**

This section screened eligible Chinese participants aged 18 to 59 who are followers of 'Greenpeace' or 'Weibo Environmental Protection' and exposed to these two accounts Weibo posts regarding environmental issues between October 1, 2020, and October 31, 2021. Only eligible participants can respond to follow-up questions.

### **Section 2: Exposure to Weibo posts regarding Environmental issues (Greenpeace, Weibo Environmental Protection environmental posts) - 6 questions**

To investigate respondents' frequency and duration of contact with Greenpeace (<https://weibo.com/u/1292378751>) Weibo Environmental Protection (<https://weibo.com/u/5754133643>) and other Weibo posts with environmental issues content of 3 types of posts.

### **Section 3: Environmental Awareness-8 questions**

Consumers were questioned about their environmental awareness following exposure to environmental posts on Weibo. Modification of all questions from Mai and Hai (2012), Linh Nguyen (2018) and Jakmongkolchai (2020).

### **Section 4: Behavioral Tendency-7 questions**

Questions assess consumers' tendency for pro-environmental activity following contact with the Weibo environment posts related to the environment. Adaptation of all questions from Mai and Hai (2012), Linh Nguyen (2018) and Jakmongkolchai (2020).

### **Section 5: Demographic Questions – 2 questions**

It mostly collects demographic information about respondents, such as their gender and degree of education.

### **3.5 Measurement of Variables**

There are three variables in this study.

Variable 1: Exposure to weibo posts on environmental issues;

Variable 2: Environmental awareness;

Variable 3: Behavioral tendencies

The frequency and duration of exposure is evaluated, and the mean and standard deviation are determined. Awareness and behavioral tendency were measured using a 5-point Likert scale (Alston & Miller, 2002).

Two correlation tests are conducted to investigate these three variables. The first objective is to examine if a relationship exists between media exposure to Weibo environmental posts and environmental awareness. The second objective is to explore the link between environmental awareness and behavioral tendencies.

H1: There is a relationship between Chinese consumers' exposure to Weibo posts regarding the environment issues and their environmental awareness.

H2: There is a relationship between environmental awareness and behavioral tendency.

### **3.6 Reliability and Validity**

To ensure validity, the advisor and the other two IS committees helped me to check the draft of the questionnaire to consider the coverage and consistency. After receiving the feedback from the advisor, make improvements according to the suggestions. Each variable is analyzed and quantified using a previous study's measuring scale to guarantee reliability and validity. The media exposure measure was developed by Bartels (1993) and has a reliability of 0.75, but the environmental awareness and behavioral intention scale was developed by Mai and Hai (2012) and Linh Nguyen (2018) and has a reliability of greater than 0.7. Additionally, a pre-test with 30 Chinese respondents were conducted prior to the main test to ensure the questionnaire's validity. The 30 participants were fluent in both English and Chinese, and several exhibited characteristics similar to those of the study's demography. The purpose of this pretest is to determine whether or not these individuals comprehended the questions' subject and consistency. Cronbach's Alpha is used to determine the



scale's reliability based on the collected data. Three variables are regarded to be associated if they have a general validity and the reliability of 0.7. (Hadler & Haller, 2013). Concerning the scales' reliability, after data gathering from respondents, the scale's reliability was re-tested. The 30 samples' reliability of the scales is 0.89, 0.87, and 0.86 for each variable, respectively.

### **3.7 Procedure of Analyzing Data & Data Presentation**

This study examined and analyzed 200 samples regarding data analysis using a social science statistical software package (SPSS). Descriptive statistical approaches such as mean, standard deviation, and frequency are employed to characterize the data for each variable. Consumers' exposure to the environment on Weibo, their environmental awareness, and their behavioral tendencies inferred statistics from the analysis. Furthermore, Pearson's Product Moment Correlation is utilized to determine the link between variables such as media exposure of Weibo posts and environmental awareness and environmental awareness and behavioral orientation.

The collected data were examined using SPSS (a statistical software package for social sciences) to produce significant findings that reveal how consumers' exposure to Weibo posts about environmental issues may influence their environmental awareness and behavioral tendencies.

The questionnaire's mean, frequency, and standard deviation can all be used to derive descriptive statistics.

Alston and Miller (2002) classified the five-point Likert scale in terms of inference statistics. Pearson's Product-Moment correlation is used to determine the correlation between variables using the model (Pearson Correlation Coefficient, 2018).

*Table 3.1 Likert Scale Interpretation*

Likert Scale	Description	Value of Allocation
1	Strongly Disagree	1.0-1.49
2	Disagree	1.5-2.49
3	Undecided	2.5-3.49
4	Agree	3.5-4.49
5	Strongly Agree	4.5-5.0

To find the correlation between the variables, Pearson's Product-Moment Correlation applies Pearson Correlation Coefficient (2020).

*Table 3.2 Pearson Product Moment Correlation*

Likert Scale	Value of Allocation
0.00	No positive association
0.00-0.25	Negligible positive association
0.25-0.50	Weak positive association
0.50-0.75	Moderate positive association
0.75-1	Very strong positive association
1.00	Perfect positive association

## **CHAPTER 4**

### **RESEARCH FINDINGS**

This chapter covers the study's results and findings. The study presents the findings of an online survey filled by 200 people aged 18 to 59 who were exposed to Greenpeace, Weibo Environmental Protection, and other Weibo posts regarding environmental issues between October 1, 2020, and October 31, 2021. During October 22, 2021 to November 19, 2021, data were collected via the online questionnaire collection platform WJX. The online questionnaire got a total of 238 responses, of which 200 were valid responses and the remaining 38 couldn't pass the questionnaire's screening question. This study's findings are organized into five sections, including the following:

4.1 Demographic Profile of the Sample

4.2 Exposure to Weibo posts regarding Environmental issues

4.3 Environmental Awareness

4.4 Behavioral Tendency

4.5 The relationship between Chinese consumers' exposure to Weibo posts, environmental awareness, and behavioral tendencies regarding environmental issues

#### **4.1 Demographic profile of the sample**

The demographic part of the study contains information about the participants' characteristics, and the data collected reveal respondents' demographic information, such as gender and educational level. We collected a total of 238 surveys. Of the total

replies, 38 were invalid due to respondents failing to pass the questionnaire's screening question.

As a result, out of a total of 200 qualified responders are between the ages of 18 and 59. The majority of respondents are male, accounting for 54% of the entire sample with 108 respondents. Females comprised the second group, accounting for 46% of the sample, or 92 respondents. Table 4.1 summarizes these findings.

*Table 4.1 Gender of respondents*

<b>Gender</b>	<b><i>n</i></b>	<b>%</b>
Female	92	46
Male	108	54
<b>Total</b>	<b>200</b>	<b>100</b>

Below bachelor's degree, Bachelor's degree or equivalent, and higher than bachelor's degree are the education levels. The majority of responders, 122 in total, or 61% of the sample, held bachelor's degrees. This was followed by samples with a higher bachelor's degree, which accounted for 20% of the sample, or 40 individuals. Those having below bachelor's degree were the fewest, accounting for 38 respondents (19% of the total). Table 4.2 displays the results.

*Table 4.2 Education level of respondents*

<b>Education Level</b>	<b><i>n</i></b>	<b>%</b>
Below Bachelor's Degree	38	19
Bachelor's Degree or Equivalent	122	61
Higher than Bachelor's Degree	40	20
<b>Total</b>	<b>200</b>	<b>100</b>

#### **4.2 Exposure to Weibo posts regarding Environmental issues**

The study's first purpose was to investigate how Chinese consumers were exposed to Weibo posts, their environmental awareness, and their behavioral tendencies concerning environmental issues. As a result, the second part of the questionnaire examined respondents' exposure to various sorts of environmental posts on the Weibo pages Greenpeace, Weibo Environmental Protection, and others. The exposure of Chinese consumers to Weibo posts about environmental issues may be examined in two dimensions: frequency and duration.

The frequency of exposure indicated how frequently respondents were exposed to 3 types of posts about environmental issues on Greenpeace, Weibo Environmental Protection, or other Weibo pages on a weekly basis. The M (mean) and SD (Standard Deviation) of respondents' media frequency were summarized in Table 4.3. On average, respondents were exposed to three categories of posts on Weibo regarding environmental issues at a mean value of 2.95 (SD=1.25). In general, exposure to three different types of Weibo environmental issues posts occur on 1-2 days per week. Weibo

Text Posts were the most commonly exposed type of content in the data ( $M= 3.04$ ,  $SD= 1.37$ ). The second category, with an average value of 2.93 ( $SD=1.41$ ), is photo posts about environmental issues. With mean score of 2.87 and  $SD$  value of 1.35, the least exposed content type is video posts about environmental issues.

*Table 4.3 Exposure to Weibo posts about environmental issues (Frequency)*

Weibo Exposure to environmental issues	Frequency per 1 week					<i>M</i>	<i>SD</i>
	Everyday	5-6 days	3-4 days	1-2 days	Less than once		
Text Posts	34	52	39	38	37	3.04	1.37
Photo Posts	36	41	39	42	42	2.93	1.41
Video Posts	29	46	31	57	37	2.87	1.35
<b>Total</b>						<b>2.95</b>	<b>1.25</b>

Note: The frequency of exposure to Weibo posts about environmental issues was determined to use a Likert Scale, where a score of 5 indicates daily exposure and a score of 1 indicates less than once exposure. Cronbach's Alpha for the scale = 0.89.

The duration of the exposure section displayed the amount of time respondents spent per week interacting with three types of posts on Greenpeace, Weibo Environmental Protection, or other Weibo posts about environmental issues, with options ranging from less than 1 minute to more than 15 minutes. The  $M$  (mean) and  $SD$  (Standard Deviation) of respondents' exposure durations were given in Table 4.4. The mean value of exposure to three types of Weibo posts is 2.85 ( $SD=1.26$ ). On average, research indicates that respondents spend between 1 and 5 minutes per week being exposed to three sorts of posts about environmental issues on Weibo. The sample

agreed to a period of exposure to text and photo posts about environmental issues (M=2.86) with SD of 1.39 for photo posts and 1.37 for text posts. The shortest exposure period of respondents was for video post (M=2.85, SD=1.40).

*Table 4.4 Exposure to Weibo posts about environmental issues (Duration)*

Weibo Exposure to environmental issues	Duration per 1 week					M	SD
	More than 15 mins	11-15 mins	6-10 mins	1-5 mins	Less than 1 min		
Text Posts	31	40	39	49	41	2.86	1.37
Photo Posts	31	46	28	54	41	2.86	1.39
Video Posts	30	47	30	48	45	2.85	1.40
<b>Total</b>						<b>2.85</b>	<b>1.26</b>

Note: The duration of exposure to Weibo posts about environmental issues was determined to use a Likert Scale, with a score of 5 indicating more than 15 minutes of exposure and a score of 1 indicating less than 1 minute of exposure. Cronbach's Alpha for the scale = 0.90.

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The frequency and duration of respondents' exposure to Weibo posts about environmental issues are consistent to a degree, as shown in Tables 4.3 and 4.4. Cronbach's Alpha was utilized to verify internal consistency, as explained in the preceding chapter. It is regarded as a measure of reliability. Cronbach's alpha values for Chinese consumers' exposure to Weibo posts about environmental issues were 0.89 and 0.90, respectively, indicating the scale's reliability. This value is 0.75 of the original Bartels (1993) scale.

Additionally, Table 4.5 summarizes the mean and standard deviations of Chinese consumers' exposure to Greenpeace, Weibo Environmental Protection, and other Weibo posts on environmental concerns. On average, exposure to various types of Weibo posts about environmental issues resulted in a mean score of 2.90 (SD=1.11). On average, data indicates that exposure to various sorts of Weibo posts lasts between 1 and 5 minutes each week and occurs every 1-2 days. The majority of contacts are via Weibo text postings (M=2.95, SD=1.15), followed by photos (M=2.90, SD=1.19). With an average score of 2.86 (SD=1.19), video posts are the least contact type.

*Table 4.5 Chinese consumers' exposure to Weibo posts about environmental issues*

<b>Exposure to Weibo posts regarding environmental issues</b>	<b><i>M</i></b>	<b><i>SD</i></b>
Text Posts	2.95	1.15
Photo Posts	2.90	1.19
Video Posts	2.86	1.19
<b>Total</b>	<b>2.90</b>	<b>1.11</b>



### 4.3 Environmental Awareness

This section provides an overview of environmental awareness. A five-point Likert Scale was used to determine whether respondents developed environmental awareness in the meaning described in the statement as a result of viewing Greenpeace, Weibo environmental protection, or other Weibo environmental posts. Respondents were asked to score the statement on a scale of 1 to 5. According to the results shown in table 4.6, respondents' mean score of environmental awareness is 3.78 (SD=1.13), indicating that they agree with and are concerned about China's current environmental problems. Based on 8 statements about environmental awareness, the statement with the highest mean number was *'I'm very knowledgeable about environmental issues'*, with a mean number of 3.91 (SD=1.01), followed by *Soil Pollution* and *Lack of Energy* (M=3.82) with SD of 1.13 and 1.10, respectively. The mean score for *Air Pollution* is 3.80 (SD=1.08). *Climate Change* and *Loss of Biodiversity* are the two environmental issues that respondents are concerned about, whose mean values are 3.77 (SD=1.21) and 3.76 (SD=1.15). *Water Pollution* is the second to last category (M=3.70, SD=1.16). On the other hand, the statement with the lowest average score of 3.69 (SD=1.20) was *'I'm concerned about deforestation in China'* indicating that Chinese consumers are least concerned about deforestation in China. The environmental awareness scale had a Cronbach alpha of 0.90, which was consistent with Linh Nguyen's (2018) original scale, which had a reliability of 0.806.

Table 4. 6 Mean and Standard Deviation of environmental awareness

Environmental Awareness	<i>n</i>					<i>M</i>	<i>SD</i>
	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree		
Air Pollution	54	88	28	23	7	3.80 (Agree)	1.08
Water Pollution	58	69	36	28	9	3.70 (Agree)	1.16
Soil Pollution	61	81	28	20	10	3.82 (Agree)	1.13
Deforestation	62	60	43	23	12	3.69 (Agree)	1.20
Loss of Biodiversity	59	78	30	22	11	3.76 (Agree)	1.15
Lack of Energy	62	74	38	17	9	3.82 (Agree)	1.10
Climate Change	70	60	33	27	10	3.77 (Agree)	1.21
Be knowledgeable about environmental issues.	63	81	36	15	5	3.91 (Agree)	1.01
<b>Total</b>						<b>3.78</b> <b>(Agree)</b>	<b>1.13</b>

Note: Environmental awareness was assessed using a five-point Likert Scale, with a score of 5 representing strong agreement and 1 expressing strong disagreement with the statement. Cronbach's Alpha for the scale = 0.90.

#### 4.4 Behavioral Tendency

This part concludes with a descriptive analysis of respondents' environmental behavioral tendencies. The five-point Likert scale was also utilized to determine if respondents had an intention for environmental protection, as demonstrated by their statements after viewing Greenpeace, Weibo environmental protection, or other Weibo environmental posts. According to the data in Table 4.7, respondents' environmental protection behavior tendency is 4.06 on average (SD=0.92), showing that respondents agree with the green behavior tendency. According to the 7 environmental behavioral tendencies statements, the statement with the highest mean number was *'I would like to save water and electricity'* with a mean score of 4.13 (SD=0.93). Statements about low-carbon transportation received an average score of 4.10 (SD=0.89). Then the statement *'I tend to reuse cups, straws, and shopping bags'* (M=4.09, SD=0.93), followed by *'I tend to properly dispose and separate non-recyclable waste'* (M=4.08, SD=0.91). Then it states, *'I tend to recycle paper, plastic bottles, glass and other recycled products'* with a mean score of 4.06, while the standard deviation (SD) is 0.88. The statement with the second lowest average score was *'I would like to purchase green products and support green brands'* (M=3.98, SD=0.95). The statement with the lowest average score of 3.95 (SD=0.93) was *'I tend to encourage friends and family to create a green lifestyle and support environment'*. This demonstrates that Chinese consumers actively push their friends and family to adopt green lifestyles, despite a relatively low level of agreement on environmental protection. The environmental behavioral tendency scale had a Cronbach alpha value of 0.84, which was consistent with Linh Nguyen's (2018) original scale, which had a reliability of 0.801.

Table 4.7 Mean and Standard Deviation of behavioral tendency

Behavioral Tendency	<i>n</i>					<i>M</i>	<i>SD</i>
	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree		
Save Water and Electricity	82	76	32	6	4	4.13 (Agree)	0.93
Low-carbon Transportation	75	82	32	9	2	4.10 (Agree)	0.89
Recycle paper, plastic bottles, glass, and others	66	92	33	5	4	4.06 (Agree)	0.88
Reuse Cups, Straws, and Shopping Bags	77	78	34	7	4	4.09 (Agree)	0.93
Dispose and separate non-recyclable waste.	73	83	34	6	4	4.08 (Agree)	0.91
Purchase Green Products & Support Green Brands.	64	85	38	8	5	3.98 (Agree)	0.95
Encourage friends and family to create green lifestyle	60	85	44	6	5	3.95 (Agree)	0.93
<b>Total</b>						<b>4.06 (Agree)</b>	<b>0.92</b>

Note: Behavioral tendency was assessed using a five-point Likert Scale, with a score of 5 representing strong agreement and 1 expressing strong disagreement with the statement. Cronbach's Alpha for the scale = 0.84.

#### **4.5 The relationship between Chinese consumers' exposure to Weibo posts, environmental awareness, and behavioral tendencies regarding environmental issues**

This section of the research used two correlation tests to evaluate two hypotheses about the associations between the three variables. The first is to examine the relationship between Chinese consumers' exposure to Weibo posts and their environmental awareness regarding environmental issues. The second is the relationship between environmental awareness and behavioral tendencies. When the significance level is set to 1%, the Pearson Product Moment Correlation coefficient is applied ( $\alpha = 0.01$ ).

According to the results shown in Table 4.8, there is a significant weak positive correlation between exposure to environmental posts on Weibo and Chinese consumers' environmental awareness ( $r=0.292$ ,  $P = 0.000 < 0.01$ ). Further investigation, a test between environmental awareness and the two dimensions of Chinese consumers' exposure to Weibo environmental posts revealed a significant weak positive connection between environmental awareness and exposure frequency ( $r=0.241$ ,  $P = 0.001 < 0.01$ ), exposure duration ( $r=0.274$ ,  $P = 0.000 < 0.01$ ). This finding suggests that changes in Chinese consumers' environmental awareness may be related to the respondents' exposure to environmental posts on Weibo and the duration of their exposure. Additionally, the more frequently and longer duration consumers are exposed to environmental posts on Weibo, the more environmentally aware they are.

H1: There is a relationship between Chinese consumers' exposure to Weibo posts and their environmental awareness regarding environmental issues.

*Table 4.8 Correlation between Chinese consumers' exposure to Weibo posts and environmental awareness*

<b>Relationship between Environmental Awareness and</b>	<b><i>r</i></b>
Exposure to Weibo posts regarding Environmental issues (Frequency)	0.241*
Exposure to Weibo posts regarding Environmental issues (Duration)	0.274*
Exposure to Weibo posts regarding Environmental issues (Greenpeace, Weibo Environmental Protection posts)	0.292*

\* Correlation is significant at the 0.01 level (2-tailed).

Table 4.9 shows that following exposure to Greenpeace, Weibo Environmental Protection, and other Weibo posts regarding environmental issues, there is a moderate positive association between environmental awareness and environmental behavior tendency ( $r = 0.507$ ,  $P = 0.000 < 0.01$ ), significance level at 0.01; This suggests that change in Chinese consumers' tendency for environmentally friendly behavior, may be associated with changes in respondents' environmental awareness. Additionally, the more environmentally aware customers are, and the more likely they are to adopt more ecologically favorable behavior tendencies.

H2: There is a relationship between environmental awareness and behavioral tendency.

*Table 4.9 Correlation between Environmental Awareness and Behavioral Tendency*

<b>Behavioral Tendency</b>	<b><i>r</i></b>
Environmental Awareness	0.507*

\* Correlation is significant at the 0.01 level (2-tailed).

## CHAPTER 5

### SUMMARY AND DISCUSSION

This chapter provides a full summary of the data analysis and research discussion based on the findings of this study. Additionally, the study's limitations, future research directions, and practical implications are also explored in this chapter.

#### 5.1 Summary

The purpose of the study is to investigate Chinese consumers' exposure to Weibo posts, their environmental awareness, and behavioral tendency regarding environmental issues. Additionally, this study examines the relationship between Chinese consumers' exposure to environmental issues on Weibo and their environmental awareness, as well as the association between environmental awareness and environmental behavioral tendencies. As a result, this research attempts to respond to the research questions:

1. How are Chinese consumers exposed to Weibo posts, environmental awareness, and behavioral tendency regarding environmental issues?
2. Is there a relationship between Chinese consumers' exposure to Weibo posts and their environmental awareness regarding environmental issues?
3. Is there a relationship between Chinese consumers' environmental awareness and their behavioral tendency?

This study conducted a quantitative survey with a sample size of 200 respondents. This study was conducted by WJX, a Chinese online voting platform, and examined 200 participants between the ages of 18 and 59. From October 1, 2020 to October 31, 2021, they were exposed to Greenpeace, Weibo Environmental Protection, and other Weibo posts on environmental issues. The questionnaire has 26 items separated into five sections: screening questions, the frequency and duration of consumers' exposure to Weibo posts, consumers' environmental awareness, behavioral tendencies, and demographic statistics. Additionally, the study must validate the scale's validity and reliability using the acquired data. SPSS assessed the 200 samples acquired following the questionnaire collection. The statistics for each question are described using descriptive statistical methods, which include the mean, standard deviation, and frequency. The inferred statistics derived from the analysis are about consumers' exposure to the environment issues on Weibo, their environmental awareness, and their behavioral tendencies. Additionally, Pearson's Product Moment Correlation was utilized to determine the association between the following variables: Chinese consumers' exposure to Weibo posts and their environmental awareness, as well as environmental awareness and behavioral tendency. On the basis of Pearson's product-moment correlation, the following two hypotheses were tested:

H1. There is a correlation between the exposure of Chinese consumers on Weibo and their awareness of environmental issues

H2. There is a certain relationship between environmental awareness and behavioral tendency.



### *Demographic Profile*

All 200 samples are between ages of 18 and 59. The majority of the 200 are men, with 108 accounting for 54% of the sample. In terms of education, 122 of the 200 respondents (61 % of the sample) held a bachelor's degree or equivalent.

### *Consumers' exposure to Weibo posts about environmental issues*

The exposure of Chinese consumers to Weibo posts about environmental issues can be quantified in two dimensions: frequency and duration. Media frequency shows that the mean value of the frequency of respondents have been exposed to 3 types of Weibo posts per week from October 1, 2020 to October 31, 2021 per is 2.95 (SD=1.38), and the duration is (M=2.86, SD=1.39). In general, exposure to three types of Weibo posts about environmental issues occurs on 1-2 days each week and lasts between 1 and 5 minutes. In terms of frequency or duration of exposure, text posts' exposure with highest mean value of frequency was 3.04 (SD=1.37) and the average duration was 2.86 (SD=1.37), which was equal to the average exposure duration on photo posts of 2.86 (SD=1.37). The content type with the lowest frequency and duration of exposure was video posts on environmental issues, with mean scores of 2.87 and 2.85 and SD values of 1.35 and 1.40, respectively.

### *Environmental Awareness of Consumers*

After being exposed to Greenpeace, Weibo Environmental Protection, or other environmental posts on Weibo, the mean score of respondents' environmental awareness was 3.78 (SD=1.13), showing that they agreed with and cared about China's present environmental concerns. Respondents stated they had a strong knowledge of environmental issues (M=3.91; SD=1.01), followed by Soil Pollution and Lack of

Energy (M=3.82), SD=1.13 and 1.10, respectively. Then there's China's air pollution issue, which received a mean score of 3.80 (SD=1.08). All respondents in this survey demonstrated an awareness of environmental issues above the mean of 3.5, with the lowest mean score for deforestation being 3.69 (SD=1.20), indicating that the sample had a strong awareness of all the environmental issues listed.

### *Behavioral Tendencies of Consumer*

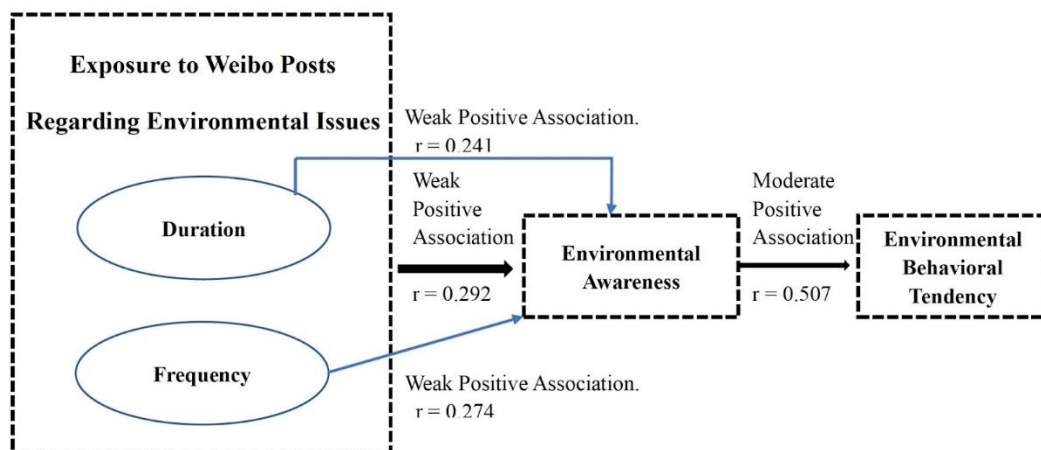
The mean score of respondents' environmental behavior tendencies is 4.06 (SD=0.92), showing that respondents agreed with the green behavior tendency. The majority of respondents choose to save energy, such as water and electricity, in the seven statements of environmental behavior tendency (M=4.13, SD=0.93). The mean for low-carbon transportation was 4.10 (SD=0.89). Although Chinese consumers aggressively encourage their friends and family to adopt a more environmentally friendly lifestyle, the average score for behavioral tendency was the lowest at 3.95 (SD = 0.93).

### *Inferential Statistics Analysis (Pearson Correlation)*

Pearson correlation test was used to collect and calculate the results. There was a weak positive association between environmental awareness and Chinese consumers' exposure to Weibo posts regarding environmental issues ( $r = 0.292$ ,  $P\text{-value} = 0.000$ ), as well as a weak positive correlation between environmental awareness and the two dimensions of Chinese consumers' exposure to Weibo posts. The frequency of exposure ( $r = 0.241$ ,  $P = 0.001$ ) and the duration ( $r = 0.274$ ,  $P = 0.000$ ). There was a moderate positive connection ( $r = 0.507$ ,  $P = 0.000$ ) between environmental awareness and behavior tendency after respondents were exposed to Greenpeace, Weibo

environmental protection, or other environmental protection posts on Weibo, with a 0.01 level of significance.

Figure 5.1 Research Findings



The findings indicated that respondents were exposed to text postings on a frequent and more prolonged basis. The majority of them exhibited an increased level of environmental awareness and tendency for environmental behavior due to their contact with Weibo posts on environmental issues. As a result, our study discovered a weak positive correlation between environmental awareness and exposure to Weibo posts among Chinese consumers contacting Greenpeace, Weibo Environmental Protection, or other Weibo posts concerning environmental issues ( $r = 0.292$ ). There was a moderate positive association between environmental awareness and behavioral tendency ( $r = 0.507$ ). In general, Figure 5.1 demonstrates that increasing the frequency and duration of exposure to Weibo posts on environmental issues increases Chinese consumers' environmental awareness, increasing their tendency for environmental protection activity.

## 5.2 Discussion

The study examines the relationship between Chinese consumers' exposure to Weibo posts, environmental awareness and behavioral tendencies.

The investigation is divided into three sections:

1. How are Chinese consumers exposed to Weibo posts, environmental awareness, and behavioral tendency regarding environmental issues?
2. What is the relationship between Chinese consumers' exposure to Weibo posts and their environmental awareness regarding environmental issues?
3. What is the relationship between Chinese consumers' environmental awareness and their behavioral tendency?

*How are Chinese consumers exposed to Weibo posts, environmental awareness, and behavioral tendency regarding environmental issues?*

According to the study's findings, respondents were most frequently exposed to text posts ( $M= 3.04$ ,  $SD= 1.37$ ), while the mean value of the duration of exposure to photo posts and text posts was 2.86, whose SD was 1.39 and 1.37, respectively. Exposure to video Posting occurred less frequently ( $M= 2.87$ ,  $SD= 1.35$ ) and shorter duration ( $M= 2.85$ ,  $SD=1.40$ ). More text posts on environmental issues are being exposed to Chinese consumers on Weibo as a result of the fact that environmental issues are frequently factual descriptions. Despite the fact that the majority of Chinese consumers prefer visual content to text-based content, some video and photo posts linked to environmental issues can cause consumers to feel adversely, causing them to prefer text-based content. (Sukosd & Fu, 2013). Furthermore, research findings

indicate that Chinese consumers are exposed to Weibo posts about environmental issues infrequently and for a short duration, with an average duration of 1-5 minutes and an average of 1-2 days each week. This is consistent with past research, as Chinese consumers would be exposed to a high number of current events and news on Weibo during their limited rest time in this era of information explosion. And, as a consequence of their fast-paced lives, they favor short narrative text posts and photo posts with a strong sense of story that can be read in a short amount of time over lengthy video postings (Liu & Zhao, 2016).

Participants exposed to environmental issues through Greenpeace, Weibo Environmental Protection, or other environmental posts on Weibo stated that they were very knowledgeable about environmental issues ( $M=3.91$ ,  $SD=1.01$ ). This finding is consistent with previous research that found that China adjusted its national development strategy to deal with climate change and achieve a low-carbon economy due to the deterioration of China's environmental problems in recent years. For some significant environmental issue management, increasing public awareness of environmental issues is critical, so government agencies, non-governmental organizations, and social media have all begun to conduct educational activities revolving around environmental issues (Guo & Marinova, 2011). The findings revealed that respondents had a neutral awareness of China's environmental issues. Instead of focusing on the most severe environmental issues, Chinese media, non-governmental organizations, and the environmental management government have all thoroughly highlighted China's seven current environmental challenges (Liu & Zhao, 2016). Consequently, respondents' environmental awareness of the seven environmental

issues is relatively similar. Along with soil and air pollution, Alibaba, a well-known Chinese corporation, has launched environmental campaigns on smog and deforestation, enticing consumers to participate in non-public welfare activities to alleviate these two ecological problems via pop-up events on its payment platform Alipay.

Environmental behavior tendency analysis revealed that the majority of respondents have a propensity to conserve energy, such as water and electricity ( $M=4.13$ ,  $SD=0.93$ ). This is consistent with the green lifestyle encouraged by the Chinese government at the moment. Through commercials and pamphlets, government organizations and the media encourage Chinese consumers to conserve resources by doing minor things such as turning off the lights and conserving water, among other things (Cheung & To, 2019). Furthermore, the findings reveal that Chinese consumers have the lowest tendency to purchase environmentally friendly items and to actively encourage their friends and family to embrace a green lifestyle ( $M=3.95$ ,  $SD = 0.93$ ). According to Zhu, Sarkis, and Lai (2012), Asian consumers purchase fewer green products than western consumers, and the majority of Chinese consumers say that the existing marketing of green products is insufficient, and there is a general lack of green publicity. Additionally, Chinese customers are often unwilling to accept the expense of environmental improvement through increased costs for green products. Even the most environmentally conscious segments appear to be price-sensitive, suggesting that Chinese consumers are more inclined to conserve water, use power, and safeguard the environment without paying for green products.

*What is the relationship between Chinese consumers' exposure to Weibo posts and their environmental awareness regarding environmental issues?*

According to the Pearson correlation test results in this study, there is a weak positive correlation between environmental awareness and Chinese consumers' exposure to Weibo posts regarding environmental issues and a weak positive correlation between environmental awareness and two dimensions of Weibo exposure: exposure frequency and exposure duration. Thus, H1 can be accepted. This finding corroborates previous studies indicating that environmental awareness and support for eco-friendly behaviors rise due to environmental issues' exposure. Thus, to raise environmental awareness, it is necessary to be exposed to and understand environmental issues (Raymond et al., 2010). Despite a limited positive correlation between environmental awareness and exposure to Weibo posts about environmental issues and their two facets, respondents report being knowledgeable about environmental issues. Consistent with other research, Chinese consumers' environmental awareness may have increased earlier through other means instead of Weibo posts, and they perceive the seriousness of environmental problems in advance, leading them to consciously avoid contacting similar environmental content on Weibo posts in the future (Guo & Marinova, 2011). Besides, several Chinese social media platforms, like Weibo, utilize big data to forecast customer preferences. Differences may develop due to the large user base, massive amount of data, and complex network topology (Qiu, Yu, Li, & Jia, 2020). As a result, there may be inaccuracies in anticipating customers' perspectives toward environmental issues. As a result, the substance of Weibo posts about environmental issues cannot catch consumers' interest, and interviewees' environmental awareness cannot be increased.

*What is the relationship between Chinese consumers' environmental awareness and their behavioral tendency?*

Results showed that environmental awareness and behavioral tendency had a moderately favorable relationship. These findings support the hypothesis of H2 and reveal a relationship between environmental awareness and behavior tendency among Chinese consumers following exposure to Greenpeace, Weibo Environmental Protection, or other environmental concerns posted on Weibo. This result shows that respondents become aware of China's environmental concerns through Weibo, gain an awareness of environmental issues, and engage in more ecologically friendly actions due to their exposure to environmental concerns. In line with past research indicating that when the public becomes aware of the environment, they should pay attention to the environment in order to increase social awareness of green consumption and, as a result, influence and change consumers' behavior in the interest of long-term environmental protection (Zhu & Sarkis, 2016).

### **5.3 Practical Implications**

#### **1) Media Platform**

Text posts on environmental issues are the most frequently exposed types on Weibo. The findings suggest that relevant social media platforms, official accounts, and government agencies should increase their use of text posts with narrative descriptions and positive effects videos and pictures to raise consumer awareness of environmental issues and publicize the importance of environmental protection.



## 2) Environmental Communicator

According to the research results, consumers have the weakest environmental awareness of deforestation. Therefore, ENGO (environmental non-governmental organizations) can mainly popularize the negative impact of deforestation on China's environment and consumers through Weibo to improve their environmental awareness and offer constructive environmental protection suggestions to relevant government agencies. Develop sustainable environmental marketing communication strategies and appropriate and effective information dissemination to increase the high participation of Chinese consumers.

## 3) Global Environmental Organization

According to research findings, many Chinese consumers are becoming aware of environmental issues, and green products from social and environmental organizations are gaining popularity. Additionally, as environmental awareness grows, Chinese consumers' tendency for environmental behavior will increase. Thus, global environmental protection organizations can attempt to increase Chinese consumers' environmental awareness through the environmental movement's external influence, mobilize their enthusiasm, and more effectively encourage their environmentally friendly buying behavior. Simultaneously, it will require coordination between international environmental organizations, the Chinese government, industry, and more public education to increase consumer awareness and behavior toward sustainability.

#### 5.4 Limitation of The Research

In general, the outcomes are satisfactory. However, there is one limitation that may be notified and resolved in the future. The current study polled Greenpeace or Weibo environmental protection followers between the ages of 18 and 59 who were interested in environmental issues. As a result, our screening questions were very stringent, and we could sense the difficulties of sample collection when we were collecting the samples. The following two factors are likely to be the most important.

1. Some Chinese consumers may be highly interested in Weibo postings regarding environmental issues, and they may also read these posts, but they may not be willing to follow the Weibo accounts due to their reason and thought.

2. During the Covid-19 pandemic, the researchers collected information about the respondents' exposure to environmental Weibo posts, such as those from Greenpeace and Weibo Environmental Protection, between October 1, 2020, and October 31, 2021. As a result of the influence of various external factors, respondents may have more contact with relevant Covid-19 Weibo posts; however, because the account does not publish posts related to environmental problems frequently, respondents may not come into contact with Weibo posts regarding environmental problems, as usual, limiting the results of the personal data collection.

Because of this, the screening criteria for samples used in such research may need to be further expanded in the future to take into consideration target consumers at each stage.

### 5.5 Direction for Future Research

1. This study's social media platform is limited, and the sample size is too small to completely grasp Chinese consumers' environmental awareness and behavior when they interact with environmental posts on Weibo. So, we can study the relationship between variables such as Chinese consumers' environmental concerns, attitude, knowledge, awareness, and behavioral inclination in the future.

2. Environmental issues are not just a Chinese issue. Consumption of green products and practices is predicted to increase in the future, notably during COVID-19. Also, China is in an era of short video and quick consumption life. Future research can evaluate how other prominent sites in China encourage users to be more eco-conscious during COVID-19 period.

3. Future research can focus on China's most pressing environmental issues, but it must also study other countries' issues. As well as understanding target populations through quantitative and qualitative research, certain multinational firms in China must build media publicity plans for global goals and implement the most appropriate media development actions to promote company image.

4. Chinese consumers are growing more aware of green products and labels, especially young Chinese consumers. Consumption of products with eco-friendly labeling is increasing in China. Consumption of eco-labels has increased environmental consciousness among Chinese Generation Z consumers. Thus, relevant green businesses must know how to notify consumers about their product's environmental impact and receive certification information via Weibo. Thus, future research directions can be developed in this area (Alston & Miller, 2002).

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## APPENDIX

### Questionnaire (English Version)

This research is part of the Communication Research Project for M.A. Strategic Communication Management students at Chulalongkorn University's Faculty of Communication Arts. The goal of this questionnaire is to explore Chinese consumers' exposure to Weibo posts, awareness, and behavioral Tendency regarding environmental issues.

This questionnaire will take about 15 minutes. Participants are requested to complete all the following questions based on their opinion as possible. The information gathered will be examined and used solely for educational reasons.

#### Section 1 Screening Question

*Instructions: Please check (✓) the answer that best represents you*

1. What is your age range?

- 1. Under 18 (end the survey).
- 2. 18 – 59
- 3. Older than 59 (end the survey)

2. Are you a follower of Weibo accounts 'Greenpeace' or 'Weibo Environmental Protection'?

- 1. Yes
- 2. No (end the survey)

3. Did you read through any social contents (text, videos, photos) from Weibo

'Greenpeace' or 'Weibo Environmental Protection' posts regarding environmental issues between Oct 1, 2020 - Oct 31, 2021?

- 1. Yes
- 2. No (end the survey)

**Section 2 Chinese consumers' exposure to Weibo posts, their environmental awareness, and behavioral tendency regarding to environmental issues**

Part 1: Exposure to Weibo posts regarding Environmental issues (Greenpeace, Weibo Environmental Protection environmental posts)

*Instructions:* Please rate the statements below according to your experience with Weibo by putting mark (✓) under the frequency below

Weibo Exposure	Frequency per 1 week				
Please rate how often you see the following	Everyday	5-6 days	3-4 days	1-2 days	Less than once
1.Text post regarding environmental issues from Greenpeace, Weibo Environmental Protection, or any other Weibo environmental issues posts					
2.Photo post regarding environmental issues from Greenpeace, Weibo Environmental Protection, or any other Weibo environmental issues posts					
3.Video post regarding environmental issues from Greenpeace, Weibo Environmental Protection, or any other Weibo environmental issues posts					

Weibo Exposure	Duration per 1 week				
Please rate how long you see the following	More than 15 mins	11-15 mins	6-10 mins	1-5 mins	Less than 1 mins
1.Text post regarding environmental issues from Greenpeace, Weibo Environmental Protection, or any other Weibo environmental issues posts					
2.Photo post regarding environmental issues from Greenpeace, Weibo Environmental Protection, or any other Weibo environmental issues posts					
3.Video post regarding environmental issues from Greenpeace, Weibo Environmental Protection, or any other Weibo environmental issues posts					

## Part 2 Environmental Awareness

*Instructions:* Do you have any of the following awareness after being exposed to Greenpeace, Weibo Environmental Protection, or other Weibo posts regarding environmental issues?

Please rate the statements below using the scale below by putting mark (✓) under the number, in the scale below: 1= Strongly disagree, 2= Disagree, 3=Undecided, 4= Agree, 5= Strongly agree.

Environmental Awareness	5	4	3	2	1
1. I'm concerned about air pollution in China					
2. I'm concerned about water pollution in China					
3. I'm concerned about soil pollution in China					
4. I'm concerned about deforestation in China					
5. I'm concerned about loss of biodiversity in China					
6. I'm concerned about lack of energy in China					
7. I'm concerned about climate change in China					
8. I'm very knowledgeable about environmental issues.					



### Part 3 Behavioral Tendency

Instructions: Please rate the statements below using the scale below by putting mark

(✓) under the number, in the scale below: 1= Strongly disagree, 2= Disagree,

3=Undecided, 4= Agree, 5= Strongly agree.

Behavioral Tendency	5	4	3	2	1
1. I would like to save water and electricity					
2. I tend to choose low-carbon transportation					
3. I tend to recycle paper, plastic bottles, glass, and other recycled products.					
4. I tend to reuse cups, straws, and shopping bags.					
5. I tend to properly dispose and separate non-recyclable waste.					
6. I would like to purchase green products and support green brands.					
7. I tend to encourage friends and family to create a green lifestyle and support environmental protection.					

**Section 3 Demographic**

*Instructions: Please check (✓) the answer that best represents you*

1: What is your gender?

- 1. Female
- 2. Male
- 3. Others

2. What is your education status?

- 1. Below Bachelor's degree
- 2. Bachelor's degree or equivalent
- 3. Higher than bachelor's degree

**Thank you for your time and participation on this survey.**

**APPENDIX B**  
Questionnaire (Chinese Version)

这项研究是朱拉隆功大学传播艺术学院战略传播管理硕士学生传播研究项目的一部分。本次问卷调查的目的是为了探究中国消费者在微博上接触关于环境问题的频率、环境意识和环境行为倾向。此外，还研究了媒体接触与环境意识之间的关系，以及环境意识与行为倾向之间的关系

问卷调查大约需要 15 分钟。请参与者根据自己的意见尽可能完成以下所有问题。收集的信息将仅用于教育目的进行检查和使用。

第一节 筛选问题

说明:请选择最适合您的答案

1. 您的年龄范围是?

1. 未满 18 岁 (结束调查)

2. 18 - 59

3. 59 岁以上 (结束调查)

2. 您是否关注了微博账号“绿色和平”或“微博环保”?

1. 是     2. 否 (结束调查)

3. 您是否在 2020 年 10 月 1 日至 2021 年 10 月 31 日期间浏览了微博“绿色和平”或“微博环保”或其他与环境问题相关的微博内容(文字、视频、照片)?

1. 是     2. 否 (结束调查)

## 第二节 中国消费者对微博环境问题帖子的曝光度、他们的环境意识和行为倾向

### 第一部分：微博环境帖子的曝光度(绿色和平、微博环保等微博环境帖子)

说明:请根据您使用微博的经验对下面的陈述进行评分，在下面的数字下加上

(√) 标记:

微博曝光	每周频率				
请问您每周观看以下几项内容的频率	每天	5-6 天	3-4 天	1-2 天	少于 1 次
1. 绿色和平、微博环保或其他微博环境帖子 (文字形式)					
2. 绿色和平、微博环保或其他微博环境帖子 (照片形式)					
3. 绿色和平、微博环保或其他微博环境帖子 (视频形式)					

微博曝光	每周时长				
请问您每周观看以下 几项内容的时长	超过 15 分 钟	11-15 分 钟	6-10 分钟	1-5 分钟	少于 1 分 钟
1. 绿色和平、微博环保 或其他微博环境帖子 (文字形式)					
2. 绿色和平、微博环 保或其他微博环境帖 子 (照片形式)					
3. 绿色和平、微博环 保或其他微博环境帖子 (视频形式)					

## 第二部分 环保意识

说明:在您浏览过绿色和平、微博环保或其他微博环境帖子后,您是否产生以下的想法,请根据您的真实的想法对下面的陈述进行评分,在数字下面标上标记(1=强烈反对,2=不同意,3=既不同意也不反对,4=同意,5=非常同意。

环保意识	5	4	3	2	1
1. 我对中国的空气污染问题感到担忧					
2. 我对中国的水污染问题感到担忧					
3. 我对中国的土壤污染问题感到担忧					
4. 我对中国的森林砍伐问题感到担忧					
5. 我对中国生物多样性问题感到担忧					
6. 我对中国的能源短缺问题感到担忧					
7. 我对中国的气候变化问题感到担忧					
8. 我对环境问题非常了解					

### 第三部分 环保行为意图

说明:请根据您的真实的想法对下面的陈述进行评分,在数字下面标上标记(1=强烈反对, 2=不同意, 3=既不同意也不反对, 4=同意, 5=非常同意。

环保行为意图	5	4	3	2	1
1. 我愿意节约用水和用电					
2. 我愿意低碳交通					
3. 我愿意回收纸张、塑料瓶和其他可回收产品					
4. 我愿意重复使用杯子、吸管和购物袋					
5. 我愿意妥善处理 and 分类不可回收的垃圾					
6. 我愿意购买绿色产品, 支持绿色品牌					
7. 我愿意鼓励朋友和家人创造绿色的生活方式, 支持环境保护					

### 第三节 人口统计

说明：请勾选（√）最适合您的答案

1. 您的性别是？

1. 女

2. 男

3. 其他

2. 您的教育情况如何？

1. 低于本科学历

2. 本科或同等学历

3. 本科以上学历



จุฬาลงกรณ์มหาวิทยาลัย  
感谢您的参与  
CHULALONGKORN UNIVERSITY

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