

Mediating Role of eWOM's in Green Behavior Interaction and Corporate Social Responsibility: A Stakeholder Theory Perspective

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Abstract

Purpose: This research explores how policymakers manage the information and communication of green behavior on social platforms to support their growth in corporate social responsibility (CSR). Social platforms play a strategic and interactive role through electronic word of mouth (eWOM), which brings unprecedented green purchase opportunities.

Method: Based on stakeholder theory, a conceptual framework is designed to investigate the influence of Green Behavior Interactions (GBIs) on CSR under the mediating effects of eWOM subfactors (eWC=eWOM communication, eWIA=eWOM information adoption, and eWSC=eWOM source credibility). Data from 414 regular stakeholders of logistics firms were analyzed via structural equation modeling (SEM).

Findings: The results reveal positive influences of the GBI on eWC, eWIA, eWSC, and CSR, with path coefficients of 0.329, 0.713, 0.809, and 0.316, respectively. The mediating effects of eWC and eWSC from the GBI to CSR were discovered with path coefficients of 0.105 and 0.226, respectively. Coincidentally, the mediating role of eWIA was positive but not supported. The outcomes of this study indicate that the administration of GBI and eWOM from a green purchase perspective is essential for a firm. The CSR practices of green logistics firms can be successfully supported by the administration of the GBI and eWOM indicators.

Originality/Value: This study develops a novel multidimensional framework that illustrates the impact of eWOM on reducing information asymmetry, enhancing credibility, supporting informed decision-making, and improving green consumer behavior. By amplifying positive reviews, increasing engagement, and establishing a feedback loop, this framework aims to provide comprehensive insights into the efficacy of eWOM for firms' products and services.

Keywords: Corporate social responsibility; green behavior; eWOM; information credibility; stakeholder theory perspective

1. Introduction

In the realm of green business paradigms, corporate social responsibility (CSR) is defined as a firm's ability to conduct operations in a manner conducive to the well-being of the economy, societal welfare, and environmental sustainability (Ahmad et al., 2024; Chu et al., 2023). According to Caulfield & Lynn (2024) CSR refers to a company's commitment to operate in a socially, environmentally, and economically sustainable manner while being accountable to its stakeholders, including employees, customers, investors,

communities, and the environment. CSR is a vital part of corporate governance, and corporations create a positive impact on society and the environment (Caulfield & Lynn, 2024; Qin & Luo, 2021; Rendtorff, 2020). China's rapid economic development has led to environmental and social challenges, pressuring companies to adopt CSR practices. CSR initiatives often target pollution reduction, labor rights, and community engagement, and stakeholders have asked firms to be more liable for such initiatives (Y. Liu et al., 2023). As the middle class grows, consumers demand higher ethical standards from companies, and CSR becomes a differentiator. The current growing awareness of CSR has led firms to promote social initiatives and green behavior through digital platforms (Jiang & Park, 2022; Park & Jiang, 2020). Expert content analysis shows that digital platform reviews and comments are crucial to green CSR evaluation (Xu, 2023; Knight et al., 2022). Social intelligence from apps and networks is priceless. The influence of consumer attitudes strengthens the green environment connection between consumers and firms through sharing information on social sites. (Ghoul et al., 2019), which could stimulate favorable feedback (Fernández et al., 2022; Shokoohyar et al., 2023). Today, digital platforms have given great means and probabilities to share online feedback about products (Liao et al., 2023). Virtual community forums such as media websites, Twitter, Facebook, WeChat, and blogs are popular digital platforms for sharing feedback, information, and knowledge (Ghoul et al., 2019; López Jiménez et al., 2021).

Digital social sites (such as Facebook, Instagram, Twitter, LinkedIn, and others) play a crucial role in CSR by providing a platform for companies to engage, communicate, and amplify their CSR efforts (Jacobson et al., 2020). Chu & Chen (2019) argued that digital platforms provide new ways for firms to express and inform customers about their activities and achievements in a green environment. CSR is affected by social platforms with high communication efficiency due to the high transmission of online feedback (Etter, 2013; Jacobson et al., 2020). Businesses are adopting innovative techniques to improve CSR to address the green environment and green behavior, (Etter, 2013; Fox & Warber, 2015; Sherrick & Hoewe, 2018) and the present research examines logistics enterprises' CSR initiatives with diverse information-based conceptions. In China, businesses and consumers are connected through online buying and selling platforms, most of which are social platforms. China's rapid digital development and distinctive

socio-political framework can teach other countries, especially emerging markets. Current research driven that how businesses may use social media to increase CSR through word of mouth by policymakers and customers. Because Chinese stakeholders are more likely to connect with CSR projects that promote social harmony and communal values due to China's collectivism. Academic research has explored the relationships between CSR, green technology adoption, and business performance, confirming its importance in modern corporate dynamics.

Word of Mouth (WOM) is the informal sharing of feedback, views, and recommendations regarding products, services, brands, and companies (Mukhopadhyay et al., 2023). Kim & Yoo (2020) argued that WOM is associated with discussing product quality and brand/firm awareness by consumers. It is the oldest technique for trustworthy and credible communication with friends, family, coworkers, or other trusted individuals, making it powerful (Baker et al., 2016). WOM used to be a better way to interact with users and firms to improve satisfaction, efficiency, and loyalty than direct services did (Chawdhary & Dall'Omo Riley, 2015; De Angelis et al., 2012). Today, with the advent of the internet, the literature now uses eWOM to describe WOM (Donthu et al., 2021), which has grown in prominence in influencing public opinion and green purchasing decisions. Fernández et al. (2022) explained that, compared with personal communication, online communication is more convenient, long-lasting, and quantifiable and involves multiway information sharing. In the industrial sector, the importance of eWOM communication (eWC) in modern companies is considerable for several developments and helps to increase firm value, the business innovation model, knowledge management, and social responsibility (Fernández et al., 2022; Markovic et al., 2022; Sherrick & Hoewe, 2018). When communicating via eWOM, firms feel free to engage with their stakeholders and converse about CSR activities and green behavior (Verma et al., 2023). China's unique cultural, political, and economic environment necessitates a localized analysis of CSR and eWOM (Ahmed et al., 2020; Chu & Chen, 2019; Chu et al., 2020). By deeply integrating local cultural, political, and economic factors into its analysis, current work could significantly enhance the firm's position in social responsibilities. The link between CSR and eWOM offers significant scholarly and practical potential, especially when addressed in the context of China. Because, by strategically aligning CSR initiatives with

cultural, regulatory, and socio-economic factors, companies in China can harness the power of eWOM to bolster their reputation, foster trust, and achieve long-term success. However, this study under discussion would be significantly stronger if it more deeply connected its findings to China's specific conditions and addressed green behavior interactions.

Basically, Green behavior, or actions motivated by environmental consciousness, is becoming an integral aspect of CSR and consumer decision-making worldwide (Eberle et al., 2013; Shen, 2021; P. Zhang & Benjamin, 2007). In China, green behavior is influenced by a blend of traditional beliefs, government initiatives, and increased consumer awareness (Schaltegger et al., 2019). For example, Confucian ideas emphasizing harmony with nature fit with modern sustainability goals, establishing a cultural basis that promotes green CSR initiatives. The role of GBIs in shaping CSR is an area of growing interest as stakeholders seek to understand how these interactions can impact a company's green behavior and CSR practices. The GBIs concept refers to exchanging information between a company and its stakeholders for changes in the green behavior of a product (Eberle et al., 2013; Shen, 2021; P. Zhang & Benjamin, 2007). GBIs typically happen between individuals, between consumers and businesses, or within communities, focusing on promoting and adopting eco-friendly and sustainable practices. These information interactions can take many forms, including corporate reporting, stakeholder engagement, and disclosure (Topal et al., 2020). GBIs are essential for fostering a culture of sustainability and influencing consumer behavior, which is under investigation. Nevertheless, the impact of these GBIs on CSR is complex and multifaceted and needs to be investigated. In the digital era, enterprises can both disseminate and procure data pertaining to their CSR endeavors, milestones, and best practices via online channels (Y. Liu et al., 2024; Veile et al., 2022). Reducing carbon emissions, optimizing fuel consumption, or adopting green technologies are considered the most crucial challenges for Chinese logistics companies. Addressing CSR challenges in logistics not only improves environmental sustainability but also enhances operational efficiency, builds brand loyalty, and meets increasing consumer demand for responsible practices (Rendtorff and Bonnafeous-Boucher, 2023). Logistics companies in China are proactively addressing CSR challenges by implementing various strategies aimed at a green environment. For example, logistical firms can optimize all

transportation routes and consolidate the shipments to minimize the emissions for customer satisfaction through gaining information from digital platforms.

Moreover, the credibility of these information sources is paramount, as stakeholders demand assurance that the information is both dependable and significant. eWOM source credibility (eWSC) is crucial for CSR because shared information can reach many viewers quickly (Hoozée et al., 2019), and online comments and opinions about a company's CSR initiatives can affect customers, investors, employees, and the public (H. Liu et al., 2024). During CSR-related disasters or controversies, eWOM can either amplify or mitigate damage. Credible sources can provide accurate information and context to manage CSR-related disasters. Credible eWOM sources can assist organizations in enhancing their CSR strategy with constructive criticism and ideas. Next, for firms, eWOM information adoption (eWIA) is key to success, which may help improve their green behavior and CSR image. For example, confidence increases when influencers, experts, and renowned online groups contribute eWOM knowledge. If information adoption is convincing, consumers can alter their preferences on the basis of several preconditions, such as the credibility of information, usefulness, and adoption of information (Verma et al., 2023; Vollero et al., 2019). Based on the above discussion, the eWSC, eWIA, and eWC concepts are being investigated as three subelements of eWOM. Hence, the current work explores the potential roles of green behavior interactions and eWOM elements to contribute to the literature and two research questions are posed:

Q.1 How do green behavior interactions impact electronic word-of-mouth and corporate social responsibility?

Q.2 Does electronic word of mouth play a mediating role among green behavior interactions and corporate social responsibility?

The structure of this article aligns with the research objectives set forth. Section 2 delves into the theoretical underpinnings that inform our conceptual framework. In Section 3, we articulate the hypothesis development. Section 4 outlines the methodology, detailing data sourcing, the analytical approach, empirical mechanisms, and hypothesis verification. Section 5 offers a discussion of the empirical findings

along with the implications. Finally, section 6 presents the conclusions, accompanied by implications and limitations of the research.

2. Literature review

2.1 Stakeholder theory (theoretical perspective):

The theoretical foundation of this study draws from a seminal model for stakeholder theory. According to Odunjo et al. (2023), stakeholder theory (ST) suggests that businesses exist not only to generate profits for shareholders but also to create value for all stakeholders who are impacted by or can impact the organization's operations. Where, business aim to generate benefits for balancing for all collaborators to maximize the collective benefits (Freeman, 1984) and reports morals in the administration of organizational issues (Rendtorff & Bonnafeous-Boucher, 2023). The origin of STs can be traced to the 1960s, which was proposed by the Stanford Research Institute as the concept of stakeholders (Parmar et al., 2010). ST is a perspective on capitalism that highlights the interdependencies between a firm and its stakeholders by perceiving green behavior, which leads to active communications, information adaptability, and credibility (Bonnafeous-Boucher & Rendtorff, 2016; Y. Liu et al., 2023; Shokoohyar et al., 2023). Freeman and David (1983) explained that individuals or groups who can affect or be affected by an organization's activities, policies, or goals are stakeholders which emphasizes an organization's responsibility to create value for its stakeholders by addressing their needs and expectations. With respect to stakeholder's expectations, a company should consider the interests of all stakeholders (employees, customers, communities, and even the environment) in its decision-making processes (Adomako & Dong Tran, 2022). ST is crucial for achieving competitive goals and holistic business success in an interconnected world.

Where, CSR refers to a company's efforts to address societal and environmental concerns beyond financial objectives (Adomako & Dong Tran, 2022). Stakeholder Theory provides the framework for integrating CSR into logistics by focusing on the interests of all affected parties. For example, logistics systems affect numerous stakeholders, including suppliers, customers, employees, and local communities. ST ensures that these impacts are considered, leading to ethical supply chain practices (Markovic et al.,

2022; Shokoohyar et al., 2023). Logistics often contributes to carbon emissions and environmental degradation. ST aligns CSR goals with stakeholder expectations, driving initiatives like green logistics, energy efficiency, and waste reduction (Odunjo et al., 2023) eWOM communication, information adoption, and source credibility act as mechanisms through which stakeholders evaluate and reinforce perceptions of an organization's CSR efforts (Adomako & Dong Tran, 2022). Schaltegger et al. (2019) argued that the major role of ST is to derive core intentions from the positive or negative evolution of green conduct, whereas subjective norms, attitudes, and actions from individuals' green behavior. ST emphasizes that organizations must consider the interests of all stakeholders (e.g., consumers, employees, communities, and regulators) to achieve long-term success (Parmar et al., 2010). However, in Figure 1, hypotheses related to green behavior interactions (e.g., H1, H2, H3) highlight how stakeholders' eco-friendly actions influence eWOM (communication, adoption, and credibility). It assumes that green behavior aligns with stakeholder expectations, which fosters engagement in eWOM. Next, hypotheses H5-H7 predict direct links between eWOM components (e.g., adoption and credibility) and CSR performance. Where, ST posits that transparent and credible communication builds trust. eWOM acts as a mechanism for stakeholders to assess a company's CSR. For mediating role of eWOM, ST theory recognizes the role of communication channels in strengthening relationships between stakeholder actions (green behavior) and organizational outcomes (CSR). The mediation hypotheses imply that eWOM amplifies stakeholder influence on CSR. Sahi et al. (2022) explained that if a company wants to maintain its legitimacy for a longer period of survival, it needs to ensure that the meaningful eWOM dynamics are followed by stakeholders. Customers are more inclined to support and engage with a company that demonstrates a commitment to environmentally sustainable practices ("green behavior") and corporate social responsibility (CSR). The involvement of customers in CSR contributes to a firm's positive public image and improves the company's profile in the eyes of stakeholders and customers (Odunjo et al., 2023; Sahi et al., 2022). A firm's green behavior activity can establish consumer faith in the brand, which may lead to increased attendance (Chu et al., 2020). The current research successfully utilized ST to formulate a hypothetical research model to explain the relationships among stakeholders' green behaviors in different contexts, such as GBI, eWOM communication, eWOM

information adoption, eWOM source credibility, green behavior and corporate social responsibility (see Figure 1). ST argues that individuals tend to identify with a product or a firm with their emotional attachment and identification. In the literature, researchers have explained how companies are engaged in CSR practices, which can be affected by consumers' sense of belonging (Adomako & Dong Tran, 2022; Gallego-Álvarez & Pucheta-Martínez, 2022).

<<Figure 1: Conceptual Framework>>

2.2 Hypothesis development:

Traditionally, CSR discussion has focused on improving stakeholder welfare for competitive reputational advantages with the public or consumers (Park & Jiang, 2020), which addresses green behavior that avoids unethical social issues (Chou et al., 2023; Ikram et al., 2019). Firms face criticism of their harmful behavior toward the environment, pollution, and unfair treatment of employees and suppliers (Ahmad et al., 2024; Chu et al., 2020). During the criticism period, shared information on online platforms played a significant role in resolving social issues. Moreover, the public's irresponsible attitude toward the green environment decreases employees' motivation, damages reputation, and causes consumer losses, which depend on WOM communications (Fernández et al., 2022). Previous studies have shown a significant disparity in the cognitive processes that people experience before experiencing emotions. In this case, interactions from sharing information and adopting information among individuals, organizations, or communities are examined, which refers to exchanging information within an organizational system. Interactive behavior plays a crucial role in facilitating knowledge exchange, collaboration, and innovation. Therefore, effective Green Behavior Interactions within the organizational system can enhance entrepreneurial activities, value creation, and the system's overall functioning (Vollero et al., 2019).

Various studies have examined the effect of GBI's effect on information from online feedback, including customers' purchase intentions, destination visit intents and brand love. For example, Abubakar et al., (2017) reported that eWOM activates consumer green behavior postpurchase and reduces negativity biases among family and friends following a pleasant service contact. To drive the generation of eWOM, several motivations, such as prepurchase expectations, satisfaction or dissatisfaction, consumer delight, and

general behavior, have been identified in the literature. Additionally, young consumers' green behavior has been investigated through the eWOM effect, and the finding shows that eWOM influences as well as engaged youth (Zhang et al., 2017). eWOM significantly influences consumer perceptions and behavior, particularly with respect to green behavior and sustainability. Customers typically utilize eWOM to validate their purchase decisions wherever they are. A large number of favorable online discussions about a company's green activities (e.g., energy-efficient goods, trash reduction programs) push others to choose environmentally friendly solutions. In eWOM communication, the effects of visual information such as videos and pictures are highly significant in terms of credibility, product interest, purchase intention, and message quality compared with those without visual information, such as articles, newspapers, and books (Lin et al., 2012). The role of information interaction in product interest and purchase intentions is revealed among product categories and visual information (Bi et al., 2019). User-generated content in eWOM platforms (blogs, forums, social media) educates consumers about green products and practices. The influence of eWOM interaction has a positive effect on customers' purchase intentions, even consumers who share their green experiences (e.g., posting about using reusable packaging or supporting brands that reduce emissions) inspire others to engage in similar behaviors (Yusuf et al., 2018). Rossmann et al. (2016) highlighted the significant impact of positive emotional experiences on eWOM generation and highlighted the importance of eWOM in the digital era. Le et al. (2023) examined eWOM processing from the receiver's perspective, conceptualized the connections, and highlighted the significance of eWOM for consumers because they shift from offline to online platforms. Moreover, the effect of CSR conversation through word-of-mouth intentions on a firm's reputation has been investigated (Fatma et al., 2020). Eberle et al. (2013) suggested that using interactive channels to communicate about CSR can have a positive effect on corporate reputation and eWOM, with higher message credibility and stronger feelings of identification with the firm through perceived interactivity in CSR. From the above discussion, the impact of GBI on eWOM communication, eWOM information adoption, eWOM source creditability, and corporate social responsibility is assumed in four proposed hypothesized relationships, which are given below:

H1: GBI has a positive influence on eWOM communication

H2: GBI has a positive influence on eWOM information adoption

H3: GBI has a positive influence on eWOM source creditability.

H4: GBI has a positive influence on eWOM corporate social responsibility.

CSR initiatives are positively linked with consumers' eWOM conversations (Fatma et al., 2020). Digital users leverage social media websites and apps to produce green images that influence human green behavior (Liu et al., 2024). Online reviews that provide customers' feedback about goods, services, and firms are examples of eWOM communication; those reviews are a reliable source of information untainted by consumers and producers (Verma et al., 2023). The relationships between green initiatives and eWOM have been investigated in different studies (Chu et al., 2020; Hoozée et al., 2019; Vollero et al., 2019). In the literature, connections between eWOM and CSR have been explored with the goal of a greener environment. For example, the influence of CSR on word-of-mouth is positive and moderated by price perception, which provides a better understanding of the role of CSR in generating word-of-mouth (Han et al., 2020). Shen (2021) developed a persuasive eWOM model by focusing on the relationships between influencers' eWOM messages and consumer participation on social media. The impact of CSR on brand development was investigated for CSR initiatives through online platforms. In this research, we investigate the mediating role of eWOM communication, eWOM information adoption, and eWOM source creditability for CSR valuation through the direct effect of GBI. Iankova et al. (2019) reported that eWOM has gained significant importance in the digital age because of the widespread use of social media platforms and online review communication. eWOM has become a powerful tool for end users to gather information, seek recommendations, and make purchase decisions through communication (Gharib et al., 2020). Furthermore, eWOM allows individuals to share their opinions and experiences with a potentially large audience, influencing the perceptions and green behaviors of others (Herhausen et al., 2019). Online communication between two parties involves changing green behavior by providing benefits from one party's feedback to another (Etter, 2013). In brief, eWOM communication about social features or information online platforms could also be beneficial for enhancing CSR. eWOM communication is considered an activity of information transformation among people who receive and provide essential

information (Fatma et al., 2020). High participation in eWOM activities means that the source of CSR communication might affect customer attitudes and actions toward a green environment (Chu & Chen, 2019). Next, eWOM information adoption in the context of eWOM refers to the process by which individuals accept and utilize the information shared through eWOM channels in their decision-making and subsequent green behaviors. The adoption of eWOM information is also influenced by consumers' motives to engage with eWOM, and eWOM information adoption by end users could occur for various reasons, such as information validation, product evaluation, and postpurchase validation (Wang et al., 2021). The quantity and quality of eWOM, as well as consumers' attitudes toward eWOM, play a critical role in the evaluation of information usefulness and adoption. The effect of the provided information on human green behavior could be speckled from one person to another person because the same message can elicit the receivers' thoughts (Ghezal, 2024; Y. Liu et al., 2024). In the literature, scholars have examined the information exchange process to understand how people assume a satisfactory level for adopting information sought from eWOM (Donthu et al., 2021). Furthermore, several factors influence the adoption of eWOM information. Attitudes toward eWOM play a significant role in how consumers engage with and adopt eWOM content (Aghakhani et al., 2018). Kaur & Kaur (2023) explained that positive attitudes toward eWOM are associated with greater interest in information, regardless of its credibility. Consumers develop attitudes toward eWOM on the basis of their perception of its credibility, including factors such as appearance, presentation, transparency, and the identity of the source (Ismagilova et al., 2020; Mahapatra & Mishra, 2017). The credibility of eWOM information is judged on the basis of the trustworthiness and expertise of the individuals generating the content. The quality and credibility of eWOM also impact information adoption. Consumers evaluate the usefulness of eWOM information on the basis of its quality and credibility (Teng et al., 2014). The more useful and credible the information is perceived to be, the greater the likelihood of adoption. Additionally, the quantity of eWOM, such as the number of reviews or recommendations, can influence consumers' evaluation of information usefulness and adoption. On the basis of the above discussion, the direct and mediating effects of eWOM communication, eWOM information adoption, and eWOM source credibility are proposed.

H5: eWOM communication has a positive influence on CSR.

H6: eWOM information adoption has a positive influence on CSR.

H7: eWOM source credibility has a positive influence on CSR.

H8: eWOM communication has a positive mediating influence on the relationship between CSR and GBI.

H9: eWOM information adoption has a positive mediating influence on the relationship between CSR and GBI.

H10: eWOM source credibility has a positive mediating influence on the relationship between CSR and GBI.

3. Methodology

3.1 Sample and data source

The data used in the analysis were gathered from a survey conducted on logistics firms (i.e., Tiantian Express, China Railway Express, Jingdong*, Zhongtong*, Yunda*, Shentong, Youzheng*, Shunfeng Express *, Jitu, Dangde, Yibang Express, and Xingchen Express) in China. The massive amount of online shopping and selling on various platforms, including Taobao, Jing Dong, Meituan, Weipinghui, E Le Ma, Dazhongdianping, and Koubei, is the primary rationale behind our selection of these logistics providers. In recent years, because of the development of logistical networks and online platforms, the Chinese market for online business has been relatively wholly integrated and well-developed. For data collection, a list of logistics companies was generated by scrutinizing the Chinese national data center Tian Yan Cha. A well-designed questionnaire was used as a data collection instrument for the survey. The respondents were identified as regular users of logistical services involving online shopping or platforms. To validate the instrument, a group of five experts related to CSR, green products, and the environment was arranged. This group verified the validity of the data collection instrument after the excellence of all the questions was analyzed. A minor modification was suggested by the experts in wording the scale items and the sentence structure, which were incorporated to assess validity. We used a pilot test for clarity and validity assessment

of the final questionnaire, which was directed at 15 respondents from the target population. The pilot test confirmed the validity and clarity of the final questionnaire.

The survey questionnaire was distributed to collect the data, measure all included constructs, and assess the structural model. The data collection instrument included ordinal scale questions (for example, gender, age, income, education, experience, and marital status) in the first section, and in the second section, adapted scale items for construct measurement were included. Additionally, each scale item was rated by respondents on a five-point Likert scale ranging from strongly influenced me to express (5), slightly influenced me to express (4), neither (3), slightly influenced me to leave (2), and strongly influenced me to leave (1). In addition, the final dataset for 414 responses was visualized through a chord diagram graphical method and offered follow-up connections between the Likert scale and 23 items (see Figure 2). According to the visualization results, most of the respondents expressed strong and slight feelings in favor of all the questions during the survey.

<<**Figure 2:** Visualization for responses >>

Among the 414 respondents, 372 were owners, and 42 were working in logistical firms. With respect to education level, 176 respondents had bachelor's degrees, 236 had master's degrees, one respondent had a Ph.D. degree, and the other option was selected for the remaining 1 respondent. The age classification and explanation of the respondents were 29= <25 years, 39= 25--30 years, 140= 30--35 years, 179= 35--40 years, and 27= above 40 years. Among the 414 respondents, 363 were men, and 51 were women, as presented in Table 1. The earning classification and explanation of respondents for one year are 34= <200k RMB, 129= 201k--250k RMB, 224= 251k--300k RMB, and 27= earnings above 300k RMB.

<<**Table 1:** Demographical Information >>

3.2 Data analysis:

The data analysis was executed through SmartPLS 4.0.9.2 statistical software. In the analysis process, factor analysis was employed in the first stage. To prove a normal univariate distribution of the data, excess kurtosis, and skewness values were examined carefully. The calculated excess kurtosis and skewness values were within the limit (see Table 1), the standardized limit for skewness was between -2 and +2, and kurtosis

was between -7 and +7 (Hair et al., 2020). Variance inflation factor (VIF) values were calculated for each item that was less than 5 (see Table 2). A VIF value is a measure of the amount of multicollinearity, which should be less than 5 because a value less than 5 indicates a low correlation among predictors (Doty & Glick, 1998; Hair et al., 2020).

<<Table 2: Factor analysis>>

Furthermore, a structural model was created, and the construct reliability and validity were considered to examine the model assessment. The model assessment was based on convergent validity (CV) and divergent validity (DV) measurements, which were restrained by factor loading and average variance extraction (AVE) values. For reliability and validity of the constructs, AVEs, composite reliability (CR), and Cronbach's alpha (CA) values were calculated by using factor loading values of scale items (Hair et al., 2020). The AVEs were above 0.5 (threshold), which reflects the convergent validity of the constructs (see Table 2). For DV examination, the Fornell–Larcker criterion, which is a method used to examine the DV, was used. In this method, the square root of the AVEs should be greater than the correlations (Fornell et al., 1981). The results show that the correlation values are lower than the square root of the AVEs, which demonstrates that the constructs are valid on the basis of the DV (see Table 3). In addition, the age, gender, education, and earnings of the respondents were controlled for in terms of CSR during the SEM analysis. The results for the control variables were insignificant for the structural model.

<<Table 3: Discriminant validity>>

3.3 Empirical mechanism:

For the empirical mechanism, this study builds stepwise regression lines to examine the proposed hypothesis for direct and mediating effects following (Chen et al., 2022). Current research uses corporate social responsibility as an explanatory construct, GBI as a core explanatory construct, and eWOM indicators (eWOM communication, eWOM information adoption, and eWOM source credibility) as intermediary constructs.

Regression lines for direct effects:

$$eWC_{it} = a_0 + a_1 IRI_{it} + a_5 controls_{it} + age + gender + education + earning + \epsilon (1)$$

$$eWIA_{it} = c_0 + c_1IRI_{it} + c_2controls_{it} + age + gender + education + earning + \epsilon(2)$$

$$eWSC_{it} = d_0 + d_1IRI_{it} + d_2controls_{it} + age + gender + education + earning + \epsilon(3)$$

$$CSR_{it} = h_0 + h_1IRI_{it} + h_2controls_{it} + age + gender + education + earning + \epsilon(4)$$

$$CSR_{it} = i_0 + i_1eWC_{it} + i_2controls_{it} + age + gender + education + earning + \epsilon(5)$$

$$CSR_{it} = d_0 + d_1eWIA_{it} + d_2controls_{it} + age + gender + education + earning + \epsilon(6)$$

$$CSR_{it} = t_0 + t_1eWSC_{it} + t_2controls_{it} + age + gender + education + earning + \epsilon(7)$$

Regression lines for intermediary effects:

$$Med(eWC_{it}) = r_0 + r_1IRI_{it} + r_2controls_{it} + age + gender + education + earning + \epsilon(8a)$$

$$CSR_{it} = f_0 + f_1IRI_{it} + f_2Med(eWC_{it}) + f_3controls_{it} + age + gender + education + earning + \epsilon(8)$$

$$Med(eWIA_{it}) = b_0 + b_1IRI_{it} + b_2controls_{it} + age + gender + education + earning + \epsilon(9a)$$

$$CSR_{it} = g_0 + g_1IRI_{it} + g_2Med(eWIA_{it}) + g_3controls_{it} + age + gender + education + earning + \epsilon(9)$$

$$Med(eWSC_{it}) = y_0 + y_1IRI_{it} + y_2controls_{it} + age + gender + education + earning + \epsilon(10a)$$

$$CSR_{it} = l_0 + l_1IRI_{it} + l_2Med(eWSC_{it}) + l_3controls_{it} + age + gender + education + earning + \epsilon(10)$$

where equations (1), (2), (3), and (4) represent the empirical mechanism for classifying the direct influence of GBI on eWOM indicators and CSR. Equations (5), (6), and (7) present the empirical mechanism used to identify the direct impacts of eWC, eWIA, and eWSC on CSR individually. Finally, the intermediary effects of eWOM indicators are identified in combined equations, i.e., the mediating role of eWC (*MedeWC*) is combined in (8), the mediating role of eWIA (*MedeWIA*) is combined in (9), and the mediating role of eWSC (*MedeWSC*) is combined in (10). Furthermore, in the equations, the castoff of the subscripts *i* and *t* is the classification of the firm and year.

3.4 SEM results (hypothesis testing):

A bootstrapping technique known as a nonparametric technique was employed to test the statistical significance of the proposed hypothesis in the PLS-SEM results. Bootstrapping is a resource used to create a subsampling list by randomly choosing observations from the original data. Then, by using the subsample data, the path model for PLS is estimated with a 5000 bootstrapping resample algorithm. The model fitness was computed through the standardized root mean square residual (SRMR), the squared Euclidean distance (d_ ULS), the geodesic distance (d_ G), chi-square, and normed fit index (NFI) values. The computed values of the model fit indices were acceptable as suggested criteria (see Table 4). Furthermore, path coefficients,

R-squared values, and levels of significance with t-values were computed for the examination of hypothetical relationships. Among the total proposed hypotheses, nine were significantly supported, and two were insignificant.

<<**Table 4: Model Fit Index**>>

The results show that the GBI has a significant effect on three elements of eWOM, i.e., eWC (H1: $\beta=0.329$, $t= 6.407$, and $p<0.000$), eWIA (H2: $\beta=0.713$, $t= 21.775$, and $p<0.000$), and eWSC (H3: $\beta=0.809$, $t=29.370$, and $p<0.000$). Where strong support with a coefficient of 0.329 shows that green behaviors directly increase eWOM communication. The H2 relationship has a very high coefficient of 0.713, indicating that green behaviors strongly encourage information adoption. Next, H3 has the strongest relationship with a coefficient of 0.809, emphasizing the importance of credibility in green behavior. The effect of GBI (H4) on CSR was significantly supported, with values of $\beta=0.316$, $t= 4.513$, and $p<0.000$. The current direct path (H4) is supported with a coefficient of 0.316, indicating that green behaviors alone can enhance CSR perceptions. Hence, the elements of eWOM, such as eWC (H5: $\beta=0.320$, $t= 7.579$, $p<0.000$), eWIA (H6 $\beta=0.114$, $t=1.960$, $p<0.050$), and eWSC (H7: $\beta=0.279$, $t=4.226$, $p<0.000$), had a significant effect on CSR (see Table 5). Active online discussions about a company's green behaviors positively influence public perceptions of its CSR activities, which shows strong support with a coefficient of 0.320, showing that eWOM communication is a key driver of CSR perception. Furthermore, the H6 path is weaker (0.114) but still supported, showing a modest link between information adoption and CSR. Strong support with a coefficient of 0.279 for the H7 path, emphasized the importance of trust and credibility in shaping CSR perceptions. The SEM construct path diagram is presented in figure 3.

<<**Table 5: Hypothesis Testing**>>

<<**Figure 3: PLS-SEM results**>>

Furthermore, the mediating effects of eWC (H8) and eWSC (H10) were positive and significantly supported by $\beta=0.105$, $t=4.875$, $p<0.000$ and $\beta=0.226$, $t=4.284$, $p<0.000$, respectively, as presented in figure 4. Coincidentally, the mediating role of eWIA (H6 $\beta=0.086$, $t=1.932$, $p<0.069$) was not significantly supported, which indicates that this mediating effect is negligible. Overall the results show that green

behaviors indirectly enhance CSR perceptions by encouraging online discussions about these behaviors. Table 5 and Figure 4 present the PLS-SEM results for the proposed mediating hypothesis. Furthermore, the intermediary role of eWOM's indicators exists among GBI and CSR at the 0.105 and 0.226 with positive probability levels, which specifies the involvement of eWC and eWSC in the antecedent of the GBI for CSR. The outcome of eWIA's mediating effect on CSR was insignificant, with a 0.072 probability level. The probability level of 0.072 is considerable but meaningless for this study because of the succeeding $p < 0.05$ standards for extreme observations.

<<Figure 4: Mediating results>>

4. Discussions

In this study, our objective is to scrutinize the direct impact of GBI on CSR while also assessing the intermediary role played by the three components of eWOM under the lens of the stakeholder theoretical perspective. To provide a robust theoretical foundation for this inquiry, logic the logistic sector elected under the consideration of eWOM, which amplifies the impact of green logistics practices towards stakeholders' green behavior. Ahmed et al. (2020) also explained that by incorporating green behavior interactions, the findings contribute to filling gaps in both local and international literature. In the Chinese context, it highlighted that the effectiveness of CSR campaigns that promote green behavior in generating eWOM, eWOM's sub-factors that influence consumer perceptions of environmentally focused CSR, and successful green initiatives draws actionable lessons. For example, findings highlighted that the impact of GBI on CSR is a subject of interest for researchers and practitioners. For instant, the positive path coefficients of the GBI highlight the importance of interactive information in enhancing CSR and eWOM. This highlight explained that logistics companies could increase interest in implementing green initiatives such as eco-friendly transportation, energy-efficient warehousing, and sustainable packaging for the encouragement of environmental consciousness. The analysis of AlSuwaidi et al. (2021) shows that CSR initiatives are heightened by GBI green behavior, which helps businesses generate a competitive advantage and build a good image. achieving a competitive edge is very difficult to win the confidence of buyers and sellers. Our outcome clearly implies that participating in GBI allows businesses to increase eWC, eWIA,

and eWSC because when individuals engage in GBI, such as when they share detailed product information, eWOM trends are more credible and trustworthy. For this reason, people trust advice with evidence. Furthermore, our results for the GBI indicate that access and interactive information, reviews, and comparisons on social sites help decision-makers make informed decisions about how to align products with respect to needs and preferences. Similarly, the greater effect of GBI on eWIA shows that engagement from consumers and businesses is very high, which leads to wider dissemination of eWOM, as more people read, comment, and share information, increasing the impact. Additionally, as an assurance of our findings, the positive impact of GBI on CSR demonstrates that a business can mitigate CSR-related risk by openly addressing challenges and providing updates on corrective actions, companies demonstrate their commitment to addressing issues promptly toward green behavior. The benefit of positive outcomes for a firm is a good assessment of firm value in terms of social responsibility. Because information interactions may inspire green innovations, green innovation plays a stronger role in promoting the CSR value of a firm. This study provides positive results for promoting transparency, educating stakeholders, raising awareness, enhancing reputation, fostering stakeholder engagement, motivating others, mitigating risks, providing a competitive advantage, ensuring regulatory compliance, and supporting the long-term sustainability of CSR initiatives. In summary, internationally, the findings from the current analysis offer insights for other countries grappling with sustainability challenges. For example, China's rapid adoption of green technology and its integration with CSR strategies serve as a model for emerging markets. China's approach to green behavior in CSR with that of other countries, offering a global perspective on best practices and areas for improvement.

With respect to the effect of eWOM indicators on CSR hand, the SEM results reveal a positive influence that helps businesses amplify CSR initiatives by spreading information about their social and environmental responsibilities to a broader audience. Moreover, the findings were similar to the study of Ahmed et al. (2020) and Czarnecka et al. (2022) concluded a positive relationship between CSR, eWOM, and green behavior. This means that positive stories or experiences related to a company's CSR activities on social media or review platforms increase the reach and visibility of CSR efforts for green behavior. The results

for eWC reveal that eWOM establishes a constant line of communication between a business and its clients. Especially in the logistics sector of China, platforms like LinkedIn, WeChat, and forums dedicated to supply chain discussions can serve as channels for generating eWOM in the logistics sector. Logistics companies that demonstrate genuine commitment to green practices are considered credible sources of sustainable innovation. Stakeholders adopt ideas from successful green initiatives publicized online. A sense of community and shared responsibility can be fostered when businesses constantly update their audience on new CSR projects and achievements. Furthermore, for the eWSC results, this work signifies that eWOM is currently a more trustworthy source than other forms of marketing and corporate communication believed by individuals. A flawless inference about this outcome is that trust in a firm's CSR initiatives can increase when consumers or stakeholders speak openly about their own experiences with the company. Furthermore, with respect to the SEM outcomes for H8 and H10, we conclude that eWC and eWSC transmit information, opinions, and recommendations because customers exchange experiences concerning companies' eco-friendly services (e.g., reduced carbon footprint delivery options). eWC and eWSC act as a bridge between the sender (a customer) and the receiver (possible customers). This mediating bridge helps businesses make decisions, manage their business image, increase sales and revenue, and build trust. In addition, a high level of monitoring for information adoption on social platforms is relatively difficult, highlighting the significance of the hypothesized relationship H9. The logistic sector was perfectly suited to investigate the proposed research framework for sustainable logistics solutions local and international forms. The interplay between GBIs, eWOM, and CSR offers competitive benefits while fostering environmental and social responsibility, building long term trust and loyalty among stakeholders.

4.1 Theoretical implications

Theoretically, the SEM results confirm an organizational phenomenon that improves performance. This study examines the logistics industry's GBI and social media's function as a mediator. eWOM, particularly its subfactor communication, information adoption, and source credibility plays a critical role in shaping CSR outcomes. The study contributes to stakeholder theory (ST) by investigating how GBIs influence CSR, which is mediated by these eWOM components.

The findings have major theoretical implications for ST, GBIs, CSR, and eWOM. For example, first, current research supports ST by showing how consumers, employees, and the community impact and are influenced by green behavior interactions and CSR activities. The findings suggest that stakeholder communication through eWOM acts as a strategic tool, reinforcing stakeholder theory by showing how these interactions shape the perception of a firm's CSR. Second, this study introduces eWOM as a central component in the CSR literature by demonstrating the mediating role of eWOM in the relationship between GBIs and CSR. CSR has traditionally been explored in terms of internal company policies and direct customer contacts, but this research places eWOM as a crucial strategy to increase a firm's legitimacy. Third, we provide an additional contribution to the growing literature on green behavior by examining how interactions around green behaviors on social platforms impact CSR. This finding shows that green enterprises may use social media to promote their practices, tying consumer participation to firm-level CSR achievements. Finally, the current study theoretically positions eWOM as a tool for reducing information asymmetry between firms and stakeholders. This is because information asymmetry often leads to distrust or skepticism in corporate green claims.

Moreover, our research provides innovative insights maintained by empirical data on the relationships among the GBI, eWC, eWSC, eWIA, and CSR. Scholars in the CSR sphere have not yet investigated how GBI and eWOM (eWC, eWSC, eWIA) indicators contribute to green behavior and CSR initiatives. To contribute to ST, this study supports the hypothesis that lawmakers or decision-makers can improve corporate performance. This research also shows that the GBI is essential for green logistics growth. In particular, findings reveal that enhancing a firm's CSR and green behavior entails the full administration of GBI on social platforms with the full mediation of eWOM, and organizations may obtain a competitive edge by combining GBI with eWOM. Finally, the collected empirical data reveal that green behavior and CSR initiatives significantly improved through the GBI and eWOM indicators.

4.2 Practical implications

This study has practical implications for policymakers, such as managers, suppliers, and consumers, who could benefit from the logistic sector's green behavior and CSR by improving online business policies.

First, policymakers could incentivize firms to improve transparency and communication about their green practices on social media and other online platforms. This study proves enhancing the credibility of electronic Word-of-Mouth (eWOM) is crucial for companies to build trust and influence consumer perceptions effectively. By following current analysis, companies can enhance the credibility of eWOM. Credible eWOM is a trust-builder and a significant driver of brand loyalty and long-term business success. Governments and regulatory bodies can even set guidelines to promote honest, transparent, and credible green claims, reducing the risks of greenwashing. Furthermore, this study suggested that companies should also highlight endorsements from credible sources such as industry experts and certifications and leverage employees as advocates to share authentic experiences. However, businesses may actively promote their green behavior and CSR activities via eWOM. By encouraging stakeholders to discuss a firm's green practices online, firms may increase their CSR activities. Second, eWSC plays a significant role in shaping stakeholders' perceptions of a firm's green behavior. To enhance eWSC, firms should partner with trusted sources, such as environmental organizations or influencers, to endorse their sustainability efforts. Furthermore, policymakers could mandate disclosure practices or reporting frameworks that require firms to provide proof of their green initiatives. The Subsequently development of industry-wide certifications or third-party verification systems could help improve the eWSC and reduce skepticism around green claims. In conclusion, managers and policymakers must manage eWOM efforts to shape the impact of GBI's impact on CSR. This study presents a fresh paradigm and clear company strategies to increase CSR performance and stakeholder confidence.

These policies provide concrete steps for how logistic companies might best serve their communities by prioritizing online business. More specifically, management should promote their companies' CSR and green behavior by consistently prioritizing eWOM activities. Thus, the managers and owners of firms must concentrate on services for the transportation of goods, which should promote green logistics while operating and manufacturing services in accordance with internationally recognized norms. The findings also revealed that GBI has a significant effect on CSR, and eWOM's indicators play a decisive intermediating role between GBI and CSR, leading scholars to conclude that acceptance of eWOM is key

to promoting CSR and GBI for a firm. Therefore, this research recommends maintaining eWOM's vitality through financing and educational programs. In addition, research also recommends that, to enhance CSR performance and green behavior, policymakers should establish transparent policies that logistics firms have implemented. Finally, this work suggests that managers should focus continuously on eWOM and GBI to unlock higher CSR for a long period of time. This can be accomplished by depending on the best possible informative resources that can ensure social responsibility in green logistical services.

5. Conclusion

This study provides evidence that eWOM reduces information asymmetry, enhances credibility, supports informed decisions and improves green consumer behavior, amplifies positive reviews, increases engagement, and establishes a feedback loop for the products/services of firms. For CSR, this work offers evidence that GBI positively impacts CSR through high transparency on social platforms, which educates stakeholders, increases awareness, enhances reputation, fosters stakeholder engagement, motivates others, mitigates risks, provides a competitive advantage, ensures regulatory compliance, and supports the long-term sustainability of CSR initiatives. As a whole, firms that prioritize the GBI strategy are more likely to benefit from positive eWOM by adapting to green behavior and CSR activities. Companies that actively promote and manage positive eWOM about their CSR initiatives can improve their reputation and achieve good social and environmental change. The results show that eWOM helps firms align their CSR initiatives with their fundamental beliefs and societal expectations, allowing them to succeed while contributing to society and the environment.

In spite of. This work offers valuable contributions for scholars, managers, practitioners and policymakers and has several limitations with respect to sample foundations, hypothetical relations, and industrial culture. First, the sample foundation for this work is limited to Chinese logistics firms. The targeted sample may have career generalizability issues since many other companies are connected with the logistical network of China. Second, this research investigates the mediating role of eWOM indicators among GBI and CSR. For future research, we suggest that research could take the eWOM concept as a moderator for GBI and CSR, which could reveal how firms can take up CSR initiatives and GBI

administration. Third, our study is limited to one industry of a particular economy; for better verification, scholars may collect data from other industries connected with social platforms. Finally, the outcomes of this work are limited to Chinese industrial culture. This may pose a culture limitation to the results, and future research may consider a broader context to validate the same research assumptions.

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References

- Abubakar, A. M., Ilkan, M., Meshall Al-Tal, R., & Eluwole, K. K. (2017). eWOM, revisit intention, destination trust and gender. *Journal of Hospitality and Tourism Management*, 31, 220–227. <https://doi.org/10.1016/J.JHTM.2016.12.005>
- Adomako, S., & Dong Tran, M. (2022). Stakeholder management, CSR commitment, corporate social performance: The moderating role of uncertainty in CSR regulation. *Corporate Social Responsibility and Environmental Management*, 29(5), 1414–1423. <https://doi.org/10.1002/CSR.2278>
- Aghakhani, N., Karimi, J., & Salehan, M. (2018). A Unified Model for the Adoption of Electronic Word of Mouth on Social Network Sites: Facebook as the Exemplar. *International Journal of Electronic Commerce*, 22(2), 202–231. <https://doi.org/10.1080/10864415.2018.1441700>
- Ahmed, M., Zehou, S., Raza, S. A., Qureshi, M. A., & Yousufi, S. Q. (2020). Impact of CSR and environmental triggers on employee green behavior: The mediating effect of employee well-being. *CORPORATE SOCIAL RESPONSIBILITY AND ENVIRONMENTAL MANAGEMENT*, 27(5), 2225–2239. <https://doi.org/10.1002/csr.1960>
- Ahmad, H., Yaqub, M., & Lee, S. H. (2024). Environmental-, social-, and governance-related factors for business investment and sustainability: a scientometric review of global trends. *Environment, Development and Sustainability*, 26(2), 2965–2987. <https://doi.org/10.1007/S10668-023-02921-X>
- AlSuwaidi, M., Eid, R., & Agag, G. (2021). Understanding the link between CSR and employee green behaviour. *Journal of Hospitality and Tourism Management*, 46. <https://doi.org/10.1016/j.jhtm.2020.11.008>
- Baker, A. M., Donthu, N., & Kumar, V. (2016). Investigating how word-of-mouth conversations about brands influence purchase and retransmission intentions. *Journal of Marketing Research*, 53(2), 225–239. <https://doi.org/10.1509/JMR.14.0099>
- Bi, N. C., Zhang, R., & Ha, L. (2019). Does valence of product review matter?: The mediating role of self-effect and third-person effect in sharing YouTube word-of-mouth (vWOM). *Journal of Research in Interactive Marketing*, 13(1), 79–95. <https://doi.org/10.1108/JRIM-04-2018-0049>
- Bonnafeous-Boucher, M., & Rendtorff, J. D. (2016). Stakeholder Theory: A model for strategic management. In *SpringerBriefs in Ethics*.

- Caulfield, M., & Lynn, A. (2024). FEDERATED CORPORATE SOCIAL RESPONSIBILITY: CONSTRAINING THE RESPONSIBLE CORPORATION. *Academy of Management Review*, 49(1), 32–55. <https://doi.org/10.5465/AMR.2020.0273>
- Chawdhary, R., & Dall’Olmo Riley, F. (2015). Investigating the consequences of word of mouth from a WOM sender’s perspective in the services context. *Journal of Marketing Management*, 31(9), 1018–1039. <https://doi.org/10.1080/0267257X.2015.1033443>
- Chen, Z., Zhang, Y., Wang, H., Ouyang, X., & Xie, Y. (2022). Can green credit policy promote low-carbon technology innovation? *Journal of Cleaner Production*, 359, 132061. <https://doi.org/10.1016/J.JCLEPRO.2022.132061>
- Chou, D. C., Chen, H. G., & Lin, B. (2023). Green IT and Corporate Social Responsibility for Sustainability. *Journal of Computer Information Systems*, 63(2), 322–333. <https://doi.org/10.1080/08874417.2022.2058643>
- Chu, S. C., & Chen, H. T. (2019). Impact of consumers’ corporate social responsibility-related activities in social media on brand attitude, electronic word-of-mouth intention, and purchase intention: A study of Chinese consumer behavior. *Journal of Consumer Behaviour*, 18(6), 453–462. <https://doi.org/10.1002/CB.1784>
- Chu, S. C., Chen, H. T., & Gan, C. (2020). Consumers’ engagement with corporate social responsibility (CSR) communication in social media: Evidence from China and the United States. *Journal of Business Research*, 110, 260–271. <https://doi.org/10.1016/J.JBUSRES.2020.01.036>
- Chu, S. C., Kim, H., & Kim, Y. (2023). When brands get real: the role of authenticity and electronic word-of-mouth in shaping consumer response to brands taking a stand. *International Journal of Advertising*, 41(6), 1037–1064. <https://doi.org/10.1080/02650487.2022.2138057>
- Czarnecka, M., Kinelski, G., Stefańska, M., Grzesiak, M., & Budka, B. (2022). Social Media Engagement in Shaping Green Energy Business Models. *Energies*, 15(5). <https://doi.org/10.3390/en15051727>
- De Angelis, M., Bonezzi, A., Peluso, A. M., Rucker, D. D., & Costabile, M. (2012). On braggarts and gossips: A selfenhancement account of word-of-mouth generation and transmission. *Journal of Marketing Research*, 49(4), 551–563. <https://doi.org/10.1509/JMR.11.0136>
- Donthu, N., Kumar, S., Pandey, N., Pandey, N., & Mishra, A. (2021). Mapping the electronic word-of-mouth (eWOM) research: A systematic review and bibliometric analysis. *Journal of Business Research*, 135, 758–773. <https://doi.org/10.1016/J.JBUSRES.2021.07.015>
- Doty, D. H., & Glick, W. H. (1998). Common Methods Bias: Does Common Methods Variance Really Bias Results? *Organizational Research Methods*, 1(4), 374–406. <https://doi.org/10.1177/109442819814002>
- Eberle, D., Berens, G., & Li, T. (2013). The Impact of Interactive Corporate Social Responsibility Communication on Corporate Reputation. *Journal of Business Ethics*, 118(4), 731–746. <https://doi.org/10.1007/S10551-013-1957-Y/METRICS>

- El Ghouli, S., Guedhami, O., Nash, R., & Patel, A. (2019). New Evidence on the Role of the Media in Corporate Social Responsibility. *Journal of Business Ethics*, 154(4), 1051–1079. <https://doi.org/10.1007/S10551-016-3354-9/TABLES/14>
- Etter, M. (2013). Reasons for low levels of interactivity. (Non-) interactive CSR communication in twitter. *Public Relations Review*, 39(5), 606–608. <https://doi.org/10.1016/J.PUBREV.2013.06.003>
- Fatma, M., Ruiz, A. P., Khan, I., & Rahman, Z. (2020). The effect of CSR engagement on eWOM on social media. *International Journal of Organizational Analysis*, 28(4), 941–956. <https://doi.org/10.1108/IJOA-10-2019-1895/FULL/PDF>
- Fernández, P., Hartmann, P., & Apaolaza, V. (2022). What drives CSR communication effectiveness on social media? A process-based theoretical framework and research agenda. *International Journal of Advertising*, 41(3), 385–413. <https://doi.org/10.1080/02650487.2021.1947016>
- Fornell, C., Larcker, D. F., Claes Fornell, D. F. Larcker., Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39. <https://doi.org/10.2307/3151312>
- Fox, J., & Warber, K. M. (2015). Queer identity management and political self-expression on social networking sites: A co-cultural approach to the spiral of silence. *Journal of Communication*, 65(1), 79–100. <https://doi.org/10.1111/JCOM.12137>
- Freeman, R. E., & David, L. R. (1983). Stockholders and Stakeholders: A New Perspective on Corporate Governance. *CALIFORNIA MANAGEMENT REVIEW*, 25(3), 88–106. <https://doi.org/10.2307/41165018>
- Gallego-Álvarez, I., & Pucheta-Martínez, M. C. (2022). The moderating effects of corporate social responsibility assurance in the relationship between corporate social responsibility disclosure and corporate performance. *Corporate Social Responsibility and Environmental Management*, 29(3), 535–548. <https://doi.org/10.1002/CSR.2218>
- Gharib, R. K., Garcia-Perez, A., Dibb, S., & Iskoujina, Z. (2020). Trust and reciprocity effect on electronic word-of-mouth in online review communities. *Journal of Enterprise Information Management*, 33(1), 120–138. <https://doi.org/10.1108/JEIM-03-2019-0079/FULL/XML>
- Ghezal, R. (2024). Determinants of engagement with and of stakeholders in CSR decision-making: a stakeholder perspective. *European Business Review*. <https://doi.org/10.1108/EBR-03-2023-0085>
- Hair, J. J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research*, 109, 101–110.
- Han, H., Al-Ansi, A., Chi, X., Baek, H., & Lee, K. S. (2020). Impact of Environmental CSR, Service Quality, Emotional Attachment, and Price Perception on Word-of-Mouth for Full-Service Airlines. *Sustainability* 2020, Vol. 12, Page 3974, 12(10), 3974. <https://doi.org/10.3390/SU12103974>
- Herhausen, D., Ludwig, S., Grewal, D., Wulf, J., & Schoegel, M. (2019). Detecting, Preventing, and Mitigating Online Firestorms in Brand Communities. *Journal of Marketing*, 83(3), 1–21. <https://doi.org/10.1177/0022242918822300>

- Hoozée, S., Maussen, S., & Vangronsveld, P. (2019). The impact of readability of corporate social responsibility information on credibility as perceived by generalist versus specialist readers. *Sustainability Accounting, Management and Policy Journal*, 10(3), 570–591. <https://doi.org/10.1108/SAMPJ-03-2018-0056>
- Iankova, S., Davies, I., Archer-Brown, C., Marder, B., & Yau, A. (2019). A comparison of social media marketing between B2B, B2C and mixed business models. *Industrial Marketing Management*, 81, 169–179. <https://doi.org/10.1016/J.INDMARMAN.2018.01.001>
- Ismagilova, E., Slade, E., Rana, N. P., & Dwivedi, Y. K. (2020). The effect of characteristics of source credibility on consumer behaviour: A meta-analysis. *Journal of Retailing and Consumer Services*, 53. <https://doi.org/10.1016/J.JRETCONSER.2019.01.005>
- Jacobson, J., Gruz, A., & Hernández-García, Á. (2020). Social media marketing: Who is watching the watchers? *Journal of Retailing and Consumer Services*, 53, 101774. <https://doi.org/10.1016/J.JRETCONSER.2019.03.001>
- Jiang, Y. (Nicole), & Park, H. (2022). Mapping networks in corporate social responsibility communication on social media: A new approach to exploring the influence of communication tactics on public responses. *Public Relations Review*, 48(1), 102143. <https://doi.org/10.1016/J.PUBREV.2021.102143>
- Kaur, D., & Kaur, R. (2023). Does electronic word-of-mouth influence e-recruitment adoption? A mediation analysis using the PLS-SEM approach. *Management Research Review*, 46(2), 223–244. <https://doi.org/10.1108/MRR-04-2021-0322>
- Kim, M., & Yoo, S. (2020). The 4th V? The effect of word of mouth volatility on product performance. *Electronic Commerce Research and Applications*, 44. <https://doi.org/10.1016/J.ELERAP.2020.101016>
- Knight, H., Haddoud, M. Y., & Megicks, P. (2022). Determinants of corporate sustainability message sharing on social media: A configuration approach. *Business Strategy and the Environment*, 31(2), 633–647. <https://doi.org/10.1002/BSE.2941>
- Le, T. D., Robinson, L. J., Dobe, A. R., Tri Le, C. D., Chi Minh City, H., Trung Ward, L., & Duc City, T. (2023). eWOM processing from receiver perspective: Conceptualising the relationships. *International Journal of Consumer Studies*, 47(1), 434–450. <https://doi.org/10.1111/IJCS.12864>
- Liao, M., Gao, Z., Zhou, J., & Li, D. (2023). Business model innovation driven by corporate social responsibility in a digital innovation ecosystem: Evidence from Chinese manufacturers. *Managerial and Decision Economics*. <https://doi.org/10.1002/MDE.3998>
- Lin, T. M. y., lu, K. Y., & wu, J. J. (2012). The effects of visual information in eWOM communication. *Journal of Research in Interactive Marketing*, 6(1), 7–26. <https://doi.org/10.1108/17505931211241341/FULL/XML>
- Liu, H., Jayawardhena, C., Shukla, P., Osburg, V. S., & Yoganathan, V. (2024). Electronic word of mouth 2.0 (eWOM 2.0) – The evolution of eWOM research in the new age. *Journal of Business Research*, 176. <https://doi.org/10.1016/J.JBUSRES.2024.114587>

- Liu, Y., Niu, J., Zhou, Y., & Huang, R. (2023). Achieving corporate sustainable development through social responsibility, green activities, and stakeholders management: A multidirectional cause analysis. *Sustainable Development*, 31(4), 2997–3007. <https://doi.org/10.1002/SD.2564>
- Liu, Y., Wu, M., Lai, K. H., Zhang, J. Z., & Wang, J. (2024). Strategic responses to market uncertainty: performance value of strategic agility and online-to-offline platform adoption. *Enterprise Information Systems*, 18(1). <https://doi.org/10.1080/17517575.2023.2292983>
- López Jiménez, D., Dittmar, E. C., & Vargas Portillo, J. P. (2021). New Directions in Corporate Social Responsibility and Ethics: Codes of Conduct in the Digital Environment. *Journal of Business Ethics*, 1, 1–11. <https://doi.org/10.1007/S10551-021-04753-Z/METRICS>
- Mahajan, R., Lim, W. M., Sareen, M., Kumar, S., & Panwar, R. (2023). Stakeholder theory. *Journal of Business Research*, 166. <https://doi.org/10.1016/J.JBUSRES.2023.114104>
- Mahapatra, S., & Mishra, A. (2017). Acceptance and forwarding of electronic word of mouth. *Marketing Intelligence and Planning*, 35(5), 594–610. <https://doi.org/10.1108/MIP-01-2017-0007>
- Markovic, S., Iglesias, O., Qiu, Y., & Bagherzadeh, M. (2022). The CSR Imperative: How CSR Influences Word-of-Mouth Considering the Roles of Authenticity and Alternative Attractiveness. *Business and Society*, 61(7), 1773–1803. <https://doi.org/10.1177/00076503211053021>
- Mukhopadhyay, S., Pandey, R., & Rishi, B. (2023). Electronic word of mouth (eWOM) research – a comparative bibliometric analysis and future research insight. *Journal of Hospitality and Tourism Insights*, 6(2), 404–424. <https://doi.org/10.1108/JHTI-07-2021-0174>
- Odunjo, O., Crane, A., & McDonagh, P. (2023). Stakeholder Existential Authenticity and Corporate Social Responsibility. *Journal of Management Studies*. <https://doi.org/10.1111/JOMS.13028>
- Park, K., & Jiang, H. (2020). Signaling, Verification, and Identification: The Way Corporate Social Advocacy Generates Brand Loyalty on Social Media. *International Journal of Business Communication*, 60(2). <https://doi.org/10.1177/2329488420907121>
- Parmar, B. L., Freeman, R. E., Harrison, J. S., Wicks, A. C., Purnell, L., & Colle, S. de. (2010). Stakeholder Theory: The State of the Art. *ACADEMY OF MANAGEMENT ANNALS*, 4(1), 403–445. <https://doi.org/10.5465/19416520.2010.495581>
- Qin, X., & Luo, Q. (2021). External pressures or internal motives? Investigating the determinants of exhibitors' willingness to adopt eco-exhibiting. *Journal of Sustainable Tourism*, 30(4), 704–722. <https://doi.org/10.1080/09669582.2021.1881104>
- Rendtorff, J. D. (2020). Corporate citizenship, stakeholder management and Sustainable Development Goals (SDGs) in financial institutions and capital markets. *Journal of Capital Markets Studies*, 4(1). <https://doi.org/10.1108/JCMS-06-2020-0021>
- Rendtorff, J. D., & Bonnafeous-Boucher, M. (eds.) (2023). *Encyclopedia of Stakeholder Management*. Edward Elgar Publishing. Elgar Encyclopedias in Business and Management series <https://doi.org/10.4337/9781800374249>

- Rossmann, A., Ranjan, K. R., & Sugathan, P. (2016). Drivers of user engagement in eWOM communication. *Journal of Services Marketing*, 30(5), 541–553. <https://doi.org/10.1108/JSM-01-2015-0013>
- Sahi, G. K., Devi, R., Gupta, M. C., & Cheng, T. C. E. (2022). Assessing co-creation based competitive advantage through consumers' need for differentiation. *Journal of Retailing and Consumer Services*, 66. <https://doi.org/10.1016/J.JRETCONSER.2022.102911>
- Schaltegger, S., Hörisch, J., & Freeman, R. E. (2019). Business cases for sustainability: A stakeholder theory perspective. *Organization and Environment*, 32(3), 191–212. <https://doi.org/10.1177/1086026617722882>
- Shen, Z. (2021). A persuasive eWOM model for increasing consumer engagement on social media: evidence from Irish fashion micro-influencers. *Journal of Research in Interactive Marketing*, 15(2), 181–199. <https://doi.org/10.1108/JRIM-10-2019-0161/FULL/PDF>
- Sherrick, B., & Hoewe, J. (2018). The effect of explicit online comment moderation on three spiral of silence outcomes. *New Media and Society*, 20(2), 453–474. <https://doi.org/10.1177/1461444816662477>
- Shokoohyar, S., Shokouhyar, S., & Mirzaei, S. (2023). Stakeholders' engagement through social media analytics in promoting sustainable development practices in the mobile supply chain: A cross-country analysis. *Business Strategy and the Environment*. <https://doi.org/10.1002/BSE.3449>
- Teng, S., Khong, K. W., Goh, W. W., & Chong, A. Y. L. (2014). Examining the antecedents of persuasive eWOM messages in social media. *Online Information Review*, 38(6), 746–768. <https://doi.org/10.1108/OIR-04-2014-0089>
- Topal, İ., Nart, S., Akar, C., & Erkollar, A. (2020). The effect of greenwashing on online consumer engagement: A comparative study in France, Germany, Turkey, and the United Kingdom. *Business Strategy and the Environment*, 29(2), 465–480. <https://doi.org/10.1002/BSE.2380>
- Veile, J. W., Schmidt, M. C., & Voigt, K. I. (2022). Toward a new era of cooperation: How industrial digital platforms transform business models in Industry 4.0. *Journal of Business Research*, 143, 387–405. <https://doi.org/10.1016/J.JBUSRES.2021.11.062>
- Verma, D., Dewani, P. P., Behl, A., & Dwivedi, Y. K. (2023). Understanding the impact of eWOM communication through the lens of information adoption model: A meta-analytic structural equation modeling perspective. *Computers in Human Behavior*, 143. <https://doi.org/10.1016/J.CHB.2023.107710>
- Vollero, A., Conte, F., Siano, A., & Covucci, C. (2019). Corporate social responsibility information and involvement strategies in controversial industries. *Corporate Social Responsibility and Environmental Management*, 26(1), 141–151. <https://doi.org/10.1002/CSR.1666>
- Wang, X., Wang, Y., Lin, X., & Abdullat, A. (2021). The dual concept of consumer value in social media brand community: A trust transfer perspective. *International Journal of Information Management*, 59. <https://doi.org/10.1016/J.IJINFOMGT.2021.102319>

- Yusuf, A. S., Che Hussin, A. R., & Busalim, A. H. (2018). Influence of e-WOM engagement on consumer purchase intention in social commerce. *Journal of Services Marketing*, 32(4), 493–504. <https://doi.org/10.1108/JSM-01-2017-0031/FULL/XML>
- Zhang, P., & Benjamin, R. I. (2007). Understanding information related fields: A conceptual framework. *Journal of the American Society for Information Science and Technology*, 58(13), 1934–1947. <https://doi.org/10.1002/ASI.20660>
- Zhang, T. (Christina), Abound Omran, B., & Cobanoglu, C. (2017). Generation Y's positive and negative eWOM: use of social media and mobile technology. *International Journal of Contemporary Hospitality Management*, 29(2), 732–761. <https://doi.org/10.1108/IJCHM-10-2015-0611/FULL/XML>

Table 1: Demographical Information of Participants

Demographical constructs	Constructs	Frequency	Percent
Gender	Male	363	87.7%
	Female	51	12.3%
Age	<25 Y	29	7.0%
	25-30 Y	39	9.4%
	30-35 Y	140	33.8%
	35-40 Y	179	43.2%
	>40 Y	27	6.5%
Education Level	Bachelor Degree	176	42.5%
	Master Degree	236	57.0%
	Doctorate	1	.2%
	Other	1	.2%
Annual earnings	200k RMB	34	8.2%
	201k-250k RMB	129	31.2%
	251k-300k RMB	224	54.1%
	301k-350k RMB	27	6.5%
Total		414	100%

Source: Created by authors

Table 2: Construct reliability and validity

Constructs	Items	Factor Loading	VIF	AVEs	Cronbach's alpha	Excess kurtosis	Skewness
	CSR1	0.659	1.461	0.705	0.914	0.455	-0.823

Corporate Social Responsibility	CSR2	0.888	3.559			-0.214	-0.283
	CSR3	0.873	3.384			-0.059	-0.341
	CSR4	0.894	3.487			0.124	-0.520
	CSR5	0.829	2.364			-0.176	-0.347
	CSR6	0.871	2.948			-0.095	-0.433
Green Behavior Interaction	GBI1	0.886	3.505			-0.250	-0.300
	GBI2	0.899	3.750			-0.105	-0.353
	GBI3	0.888	3.326	0.782	0.944	-0.346	-0.277
	GBI4	0.883	3.363			-0.274	-0.292
	GBI5	0.843	2.689			-0.522	-0.120
eWOM Communication	GBI6	0.903	3.923			-0.395	-0.304
	eWC1	0.875	2.077			0.384	-0.988
	eWC2	0.913	2.894	0.807	0.880	0.375	-0.820
eWOM Information Adoption	eWC3	0.906	2.727			0.207	-0.791
	eWIA1	0.872	2.027			0.010	-0.210
	eWIA2	0.833	1.806	0.714	0.800	0.118	-0.503
eWOM Source Credibility	eWIA3	0.831	1.542			-0.378	-0.297
	eWSC1	0.861	2.604			-0.293	-0.228
	eWSC2	0.867	2.725			-0.067	-0.385
	eWSC3	0.853	2.418	0.713	0.899	0.070	-0.452
	eWSC4	0.820	2.092			-0.306	-0.159
	eWSC5	0.820	2.089			-0.211	-0.343

Note: eWC= eWOM communication, eWIA=eWOM information adoption, eWSC=eWOM source credibility, CSR= Corporate Social Responsibility, and VIF= variance inflation factor.

Source: Created by authors

Table 3: Discriminant validity

Discriminant Validity (Fornell-Larcker criterion)					
	CSR	GBI	eWC	eWIA	eWSC
Corporate Social Responsibility	0.840				
Green Behavior Interaction	0.732	0.884			
eWOM communication	0.577	0.329	0.898		
eWOM information adoption	0.679	0.713	0.401	0.845	
eWOM source credibility	0.746	0.809	0.381	0.746	0.844

Source: Created by authors

Table 4: Model Fit Index

Fit indices	Saturated model	Estimated Model
Standardized root mean square residual (SRMR)	0.061	0.075
Squared Euclidean distance (d_ ULS)	1.423	2.105
Geodesic distance (d_ G)	0.613	0.675
Chi-square	1394.287	1468.291

Normed fit index (NFI)

0.839

0.83

Source: Created by authors

Table 5: Structural model results

Hypothetical Paths	Path coefficients	Standard deviation (STDEV)	T statistics (O/STDEV)	Results
H1=GBI -> eWC	0.329***	0.051	6.607	Supported
H2=GBI -> eWIA	0.713***	0.033	21.679	Supported
H3=GBI -> eWSC	0.809***	0.028	29.104	Supported
H4=GBI -> CSR	0.316***	0.07	4.513	Supported
H5=eWC -> CSR	0.320***	0.042	7.579	Supported
H6=eWIA -> CSR	0.114*	0.061	1.96	Supported
H7=eWSC -> CSR	0.279***	0.067	4.226	Supported
H8=GBI -> eWC -> CSR	0.105***	0.023	4.875	Supported
H9=GBI -> eWIA -> CSR	0.086(p=0.072)	0.044	1.932	Not supported
H10=RI -> eWSC -> CSR	0.226***	0.055	4.284	Supported

Note: eWC= eWOM communication, eWIA=eWOM information adoption, eWSC=eWOM source credibility, CSR= corporate social responsibility, GBI= Green Behavior Interactions, *=sig. level for <0.05, ***=sig. level for <0.000 **Source:** Created by authors

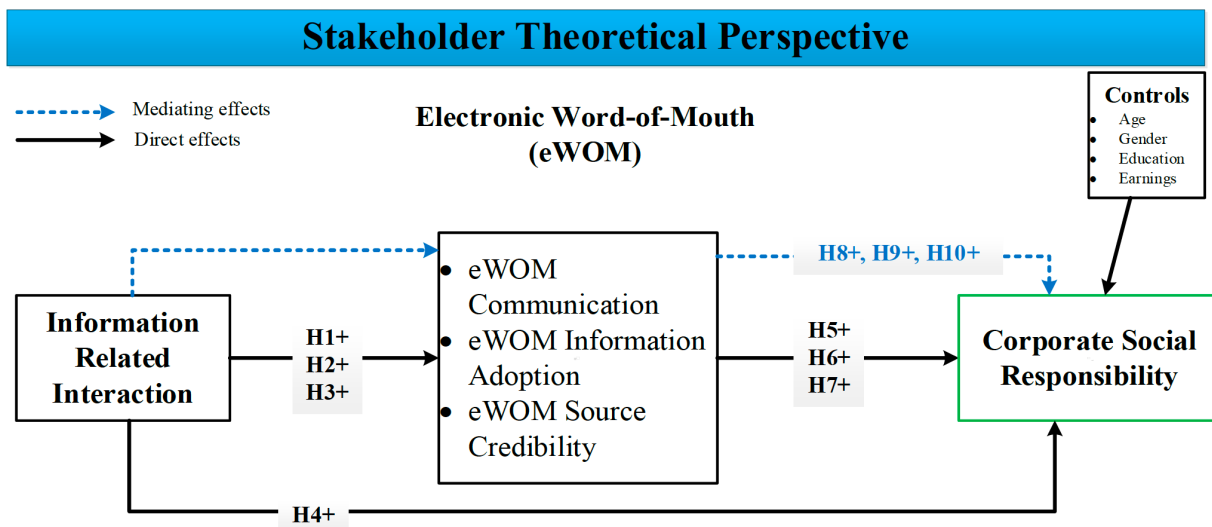


Figure 1: Conceptual Framework. where “H” denotes the proposed hypothesis. **Source:** Figure by authors

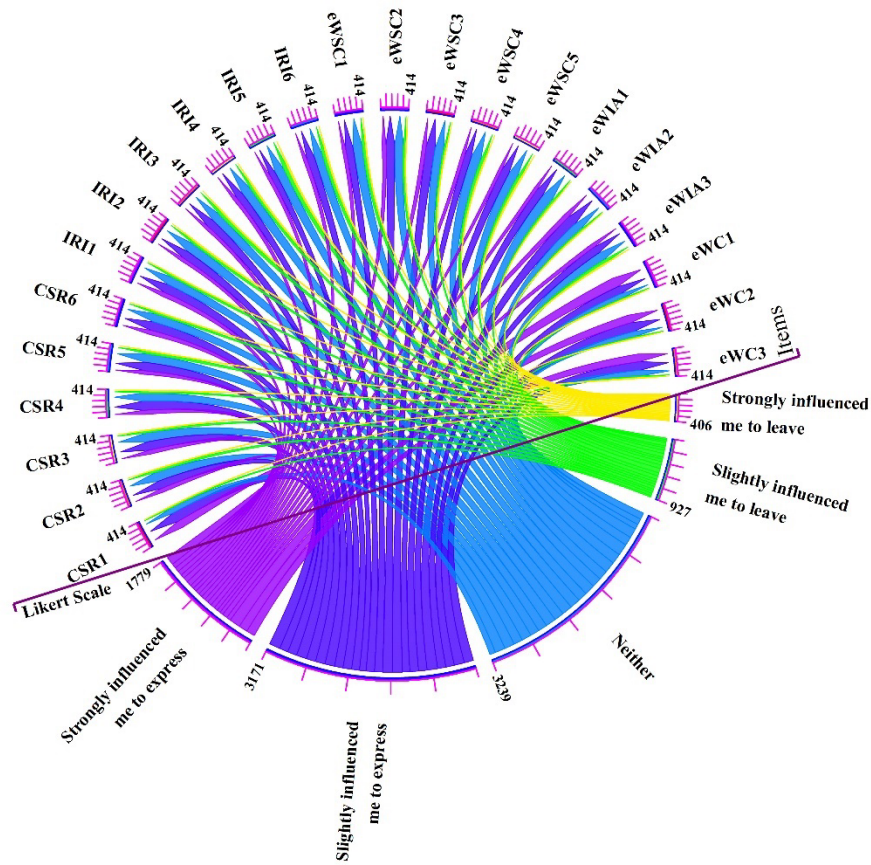


Figure 2: Visualization of the responses. where eWC= eWOM communication, eWIA=eWOM information adoption, eWSC=eWOM source credibility, CSR= corporate social responsibility, and GBI= Green Behavior Interactions. **Source:** Figure by authors

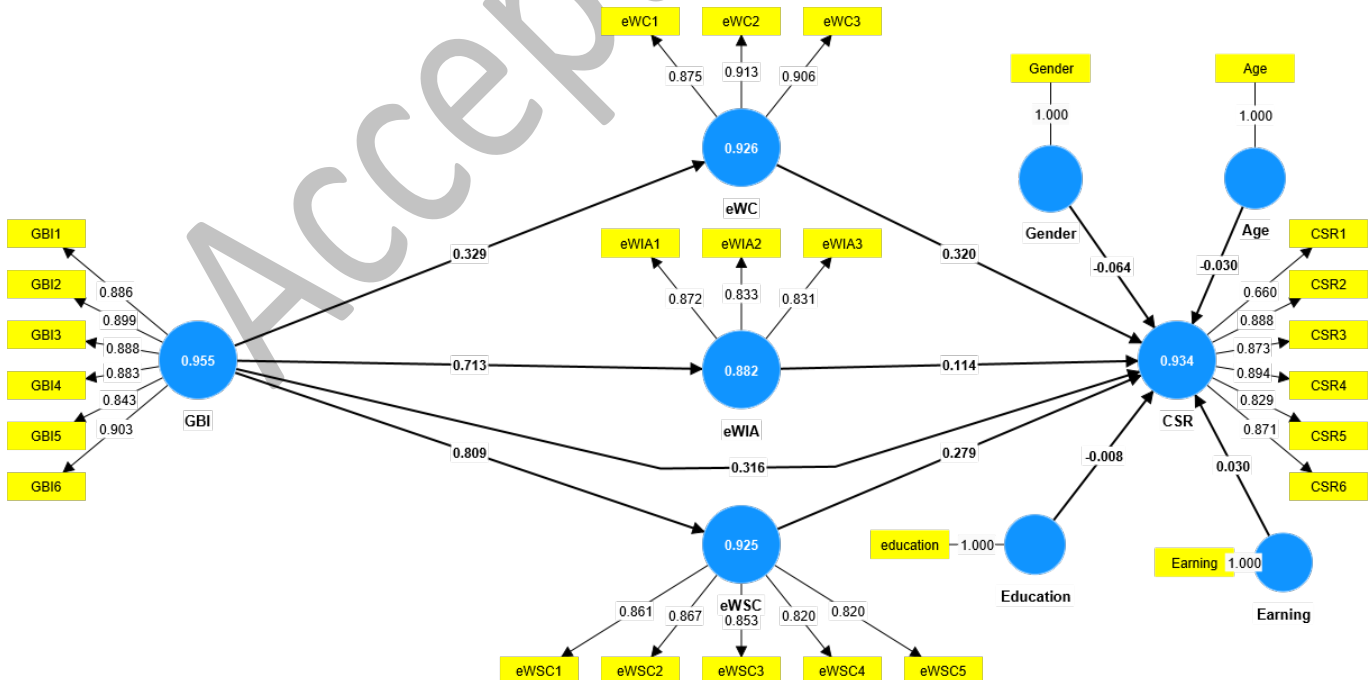


Figure 3: PLS–SEM results. where eWC= eWOM communication, eWIA=eWOM information adoption, eWSC=eWOM source credibility, CSR= corporate social responsibility, and GBI= Green Behavior Interactions. **Source: Figure by authors**

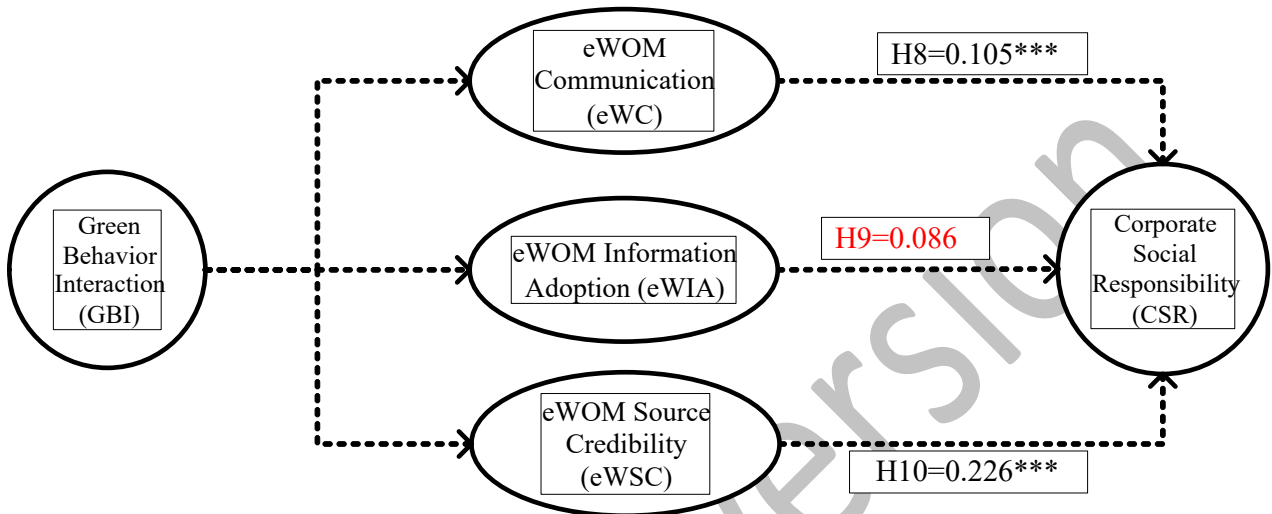


Figure 4: Structural model result (mediating effect) **Source: Figure by authors**