

The Mechanisms of ESG-Oriented Digital Marketing in Shaping Consumers' Purchase Intentions toward New Energy Vehicles

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Abstract: Against the background of the "dual carbon" strategy, the new energy vehicle (NEV) industry has developed rapidly, yet consumers still have concerns about driving range, technology, and after-sales service, which in turn affect their purchase intentions. Based on the Stimulus-Organism-Response (S-O-R) theory, this paper reviews relevant studies on ESG responsibility practices and digital marketing, and proposes a conceptual framework of "ESG-oriented digital marketing-brand favorability-purchase intention," with brand familiarity introduced as a moderating variable. The literature indicates that disclosing ESG information through social media, short videos, and livestreaming can enhance consumers' trust and emotional resonance, and this effect is influenced by differences in brand familiarity. Integrating ESG and digital marketing perspectives, this paper reveals the role of emotional mechanisms in high-involvement consumption and provides theoretical and practical implications for NEV enterprises to enhance consumers' purchase intentions.

Keywords: ESG; Digital Marketing; Brand Favorability; Purchase Intention; S-O-R

1. Introduction

Against the backdrop of global climate change and the "dual carbon" strategy, new energy vehicles have gradually become an important direction for sustainable transportation and industrial upgrading. In recent years, the Chinese new energy vehicle market has continued to expand, but consumers still worry about issues such as range, technical reliability, after-sales service, and vehicle residual value during the purchasing process. These uncertain factors have to some extent limited the further popularization of the market^[1]. Therefore, how to alleviate concerns and stimulate green purchase intention through appropriate marketing methods has become a focus of attention in both academia and industry.

In this context, environmental, social, and governance (ESG) is gradually entering the strategic vision of enterprises. Unlike traditional corporate social responsibility (CSR), ESG emphasizes the comprehensive implementation of environmental emissions reduction, social responsibility, and governance transparency, which helps companies establish a long-term stable and sustainable image^[2]. At the same time, the rise of digital marketing has provided new possibilities for the dissemination of ESG information. By utilizing channels such as social media, short videos^[3], and livestreaming e-commerce^[4], businesses can interact with consumers more frequently and directly, making information appear more authentic and easier to accept. Previous studies have shown that interactivity in livestreaming scenes and the trust brought by hosts can greatly increase consumers' purchase intention. However, most existing studies focus separately on ESG and digital marketing, with limited discussion on how the two interact and influence consumers in different contexts^[5]. Especially in high-involvement consumption scenarios such as new energy vehicles, there is still a lack of systematic theoretical framework and empirical support on how ESG and digital marketing jointly affect consumers' psychological reactions and purchase intentions.

Therefore, this article primarily adopts the Stimulus – Organism – Response (S-O-R) framework, with the Theory of Reasoned Action (TRA) referenced as supplementary support for explaining purchase intention formation, and reviews and summarizes the relevant research on ESG, digital marketing, brand favorability, and purchase intention toward new energy vehicles (NEVs). Under this framework, we propose a conceptual model that includes "ESG-oriented digital marketing brand favorability purchase intention" and uses brand familiarity as a moderating variable. The main contributions of this article are

reflected in the following aspects:

- 1) Integrating ESG and digital marketing in the context of new energy vehicles fills a research gap;
- 2) Emphasizing the mediating role of brand favorability in consumer psychological mechanisms further expands the application of the S-O-R theory;
- 3) Introducing brand familiarity as a moderating variable not only reveals how consumer cognitive differences affect marketing effectiveness, but also provides reference for new energy vehicle companies to develop more targeted communication and marketing strategies.

2. Theoretical Foundations and Conceptual Definitions

2.1 ESG

ESG originated in the investment field and has gradually developed into an important framework for companies to demonstrate social responsibility and long-term value with the popularization of sustainable development concepts ^[6]. In specific dimensions, environment (E) mainly covers carbon emissions, energy efficiency, pollution control, and resource utilization; Society (S) focuses on employee health and safety, fair pay, diversity and inclusivity, as well as community and consumer rights; Governance (G) involves board structure, anti-corruption mechanisms, and transparency of information disclosure ^[7]. Previous studies have found that actively practicing ESG can enhance consumer trust and brand evaluation, and further promote green purchasing intentions ^[8]; If there is a lack of transparency or greenwashing in information disclosure, it may weaken consumer trust and damage corporate image ^[9].

2.2 Digital Marketing

Digital marketing refers to the use of various tools such as big data, social media, short videos, livestreaming, e-commerce platforms, among others. by enterprises to establish interaction with consumers and achieve value co-creation. Compared with traditional advertising, it is real-time, personalized, and immersive, which can effectively convey complex information and value propositions ^[10]. Digital marketing plays an increasingly important role in ESG information dissemination. On the one hand, social media platforms have increased consumer engagement, enabling ESG content to reach target audiences through storytelling and emotional expression ^[11]; On the other hand, the visualization and authenticity of short videos and livestreaming e-commerce can help alleviate consumers' doubts about ESG statements, thereby improving the credibility of information ^[12]. However, if the content of the communication is disconnected from the core values of the brand, or the expression is too rigid, it may backfire, arouse suspicion, and weaken the overall communication effect.

2.3 Brand favorability

Brand favorability refers to consumers' positive emotions and overall impression of a brand, such as intimacy, trust, and comprehensive evaluation of the brand. Previous studies have found that brand personality attractiveness (BPA) is composed of favorability, originality, and clarity, and is significantly positively correlated with consumers' brand attitudes and purchase intentions ^[13]. When the values conveyed by a brand are consistent with the situation or values of consumers, people are more likely to form a positive attitude, thereby enhancing their goodwill towards the brand ^[14]. Meanwhile, brand attitude, familiarity, and motivation for self-presentation can subtly influence the process of self brand connection, thereby deepening consumers' positive impressions of the brand ^[15]. In addition, personal psychological characteristics are also important, such as fixed thinking patterns, which may deepen brand dependence and emotional connections through brand self-investment ^[16].

2.4 Purchase intention

Purchase intention is usually understood as the subjective likelihood of consumers purchasing a certain product or service in the future, and is also an important reference indicator for predicting actual purchasing behavior ^[17]. In the context of the consumption of new energy vehicles, the formation of purchase intention is not only influenced by risk perception and value perception, but also constrained by external environmental factors such as price subsidies and policy support ^[18]. With the development of digital communication, electronic word-of-mouth (eWOM) plays an increasingly crucial role in

consumers' decision-making process, and content sharing on social platforms can significantly increase consumers' purchase intention [19]. In addition, trust is particularly important in the purchasing process of high-involvement products, as it can alleviate consumer uncertainty and promote sustained or even repetitive purchasing behavior [20].

2.5 S-O-R theoretical perspective

The S-O-R theory suggests that external stimuli can shape an individual's behavioral intentions by influencing their psychological state [21]. In the research framework of this article, ESG-oriented digital marketing serves as the external stimulus (S), brand favorability represents the organismic response (O), and purchase intention corresponds to the behavioral outcome (R). Previous studies have validated the applicability of this model in the fields of green consumption and sustainable communication [22]. For example, green advertising, environmental labels, and social responsibility activities can often serve as stimuli that trigger changes in consumers' emotions and attitudes, thereby affecting their purchase intention [23]. From this, it can be seen that in the high-involvement consumption scenario of new energy vehicles, the S-O-R theory can effectively explain the entire process from consumers' exposure to ESG information to their intention to purchase.

3. Theoretical framework

3.1 Stimulus-Organism-Response (S-O-R) Model

The Stimulus-Organism-Response (S-O-R) theory originated from psychological research and has gradually been introduced into the fields of marketing and consumer behavior. This theory emphasizes that external stimuli can ultimately trigger behavioral responses by influencing an individual's psychological state. In the research of green consumption and digital communication, S-O-R has been validated multiple times. For example, the level of crowding in stores and employee interaction can serve as external stimuli that significantly affect consumer satisfaction and repurchase intention [24]; In the context of smart tourism, physical, social, and cultural stimuli can enhance tourist loyalty through perceived value [25]; In social e-commerce, interactive experiences enhance consumers' sustained purchase intention through immersive experiences [26]; Green design and environmental atmosphere can also promote sustainable consumption behavior [27]. Based on these studies, this article regards new energy vehicles as typical high-involvement products, ESG digital marketing as external stimuli (S), brand favorability as the organismic response (O), and purchase intention as the final behavioral outcome (R), which conforms to the logical chain of "information reception psychological response behavioral choice".

3.2 Theory of Reasoned Action (TRA) as Supplementary Support

The Theory of Reasoned Action (TRA) was proposed by Fishbein and Ajzen, emphasizing that an individual's attitude and subjective norms jointly influence their behavioral intentions, and is therefore often used to explain consumer decision-making processes. The applicability of TRA has been repeatedly validated in research on green consumption and sustainable behavior. For example, when consumers perceive green value, they are often more willing to generate purchase intention due to the formation of positive attitudes, and trust plays a key role in this [28]. Related studies have also shown that attitudes and subjective norms have a significant impact on entrepreneurial intentions, indicating that this theory has explanatory power in different contexts [29]. At the same time, an individual's personality traits, level of trust, and concerns about privacy can also affect their attitudes and perceived experiences in the digital environment, indirectly influencing their purchase intention, thereby further expanding the explanatory scope of TRA [30]. Based on these results, this article believes that a positive attitude of consumers towards ESG digital marketing is a salient prerequisite for increasing their purchase intention toward NEVs. In this study, the Theory of Reasoned Action is not applied as a structural modeling framework, but is referenced to conceptually support the explanation of how consumers' attitudinal evaluations are associated with purchase intention.

3.3 The mechanism of brand favorability

Brand favorability reflects consumers' emotional evaluation of a brand. Research has shown that visual cues, such as cute brand logos, can enhance consumers' perception of the "growth potential" of a

brand, thereby significantly enhancing brand attitudes, especially when consumers are in a positive emotional state [31]. In addition, brand image is not only determined by performance attributes such as ability and achievement, but also influenced by factors such as media influence and popularity, which collectively determine consumers' overall evaluation of the brand and thus affect its market value [32]. At the level of value fit, when the value conveyed by a brand is consistent with the consumer's value ranking or ideal self, it will enhance the brand attitude and purchase intention through a "self expansion" mechanism [33]. The mode of dissemination cannot be ignored either. For example, the credibility of virtual spokespersons is usually lower than that of real spokespersons, but if rational language is used, it can to some extent compensate for this deficiency [34].

4. Conceptual models and research propositions

Based on the literature review and theoretical framework in the previous section, this article constructs a conceptual model: ESG-oriented digital marketing affects the purchase intention of new energy vehicles through brand favorability, while brand familiarity plays a moderating role between ESG digital marketing and purchase intention.

P1: ESG-oriented digital marketing is positively associated with consumers' purchase intention toward new energy vehicles.

Existing research generally indicates that a company's proactive ESG practices can positively influence consumers' attitudes and behavioral intentions. The systematic review indicates that ESG has gradually become a key factor driving purchase intention [35]. For example, in the financial services industry, higher ESG ratings not only enhance customer trust and positive attitudes, but are also positively correlated with their subsequent consumption behavior [36]. In the context of the hotel industry, consumers' awareness and perceived benefits of ESG have significantly increased their willingness to visit [37].

P2: Brand favorability is expected to mediate the relationship between ESG-oriented digital marketing and consumers' purchase intention toward new energy vehicles.

Brand favorability reflects consumers' emotional evaluation of a brand, and research has shown that it plays an important mediating role between marketing activities and purchase intention. Specifically, the credibility and attractiveness of influencers can increase consumers' purchase intention by improving brand attitudes [38]. The positive label on the packaging can also shape a positive brand attitude and influence consumers' purchasing decisions [39]. In addition, the professionalism and interactivity of internet celebrities have been found to help improve brand favorability, thereby promoting purchase intention [40].

P3: Brand familiarity may positively moderate the relationship between ESG-oriented digital marketing and consumers' purchase intention toward new energy vehicles.

Brand familiarity largely determines consumers' acceptance of marketing information. Previous studies have shown that higher brand familiarity can enhance consumer trust and cognition, thereby improving marketing effectiveness. For example, it not only has a positive impact on purchase intention for green products, but is also moderated by the host's environmental knowledge [41], and indirectly affects the purchase intention through the credibility and professionalism of social media influencers [42]; Furthermore, in the context of advertising games, the interaction between brand familiarity and advertising attitude will further influence consumers' purchasing decisions [43]. It can be seen that brand familiarity plays a key moderating role between ESG digital marketing and purchase intention.

5. Discussion and Implications

5.1 Theoretical significance

At the theoretical level, the main contributions of this study are reflected in the following aspects. In the first place, combining ESG with digital marketing addresses the shortcomings of existing research, which often starts from a single perspective and expands the boundaries of sustainable consumption research. Secondly, emphasizing the mediating role of brand favorability in consumer psychological mechanisms further enriches the applicability of the S-O-R model in high-engagement product contexts. The introduction of brand familiarity as a moderating variable has become instrumental in revealing how individual differences shape the effectiveness of ESG digital communication, providing new insights for

subsequent research. Finally, this study primarily adopts the S-O-R framework. Concepts from attitude-based decision theories, such as the Theory of Reasoned Action, are referenced to support the explanation of how consumers' internal evaluations translate into purchase intentions, thereby enhancing the theoretical coherence of the proposed research model in the context of new energy vehicle consumption.

5.2 Management Insights

At the managerial level, this study provides the following implications for NEV enterprises. Firstly, companies should organically integrate ESG elements into digital communication, enhancing consumer trust and recognition through transparent information disclosure and continuous responsibility fulfillment. Furthermore, it is important to value the diversity and interactivity of digital channels, fully utilizing short videos, livestreaming, and e-commerce platforms to enhance consumer engagement and immersive experiences. Again, in the process of dissemination, it is necessary to strengthen emotional communication and story expression, avoid excessive reliance on technical parameters in order to further enhance brand favorability. At the same time, companies should also develop targeted strategies based on differences in brand familiarity: for well-known brands, strengthening ESG information can consolidate market advantages; For emerging brands, it is necessary to gradually establish consumer awareness and trust through education and interaction. Finally, when formulating marketing strategies, new energy vehicle companies should actively cooperate with the national green development strategy and industrial policies to achieve sustainable advantages and long-term value creation in competition.

6. Conclusion and Future Research Directions

This study takes new energy vehicles as its research object, systematically sorts out the relationship between ESG, digital marketing, brand favorability, and purchase intention, and proposes a comprehensive model that includes mediation and moderation effects. The reviewed literature suggests that ESG-oriented digital marketing can enhance consumers' purchase intention; Brand favorability plays a crucial mediating role in it; Brand familiarity further affects the strength of this mechanism.

In terms of contribution, this article mainly focuses on three aspects. First, this study integrates ESG with digital marketing to expand the research perspective of sustainable consumption. Second, this study emphasizes the role of emotional and cognitive factors in the consumer decision-making process. Third, through cross-theoretical integration, this study constructs a research framework that is more aligned with the consumption context of new energy vehicles.

Naturally, this study has several limitations. Future research can be expanded in the following directions. First, future studies could conduct cross-cultural comparisons to examine differences in consumer sensitivity and responses to ESG across different countries and cultural contexts. Second, future research could expand the digital context and conduct in-depth investigations into the dissemination mechanisms of emerging channels, such as short videos, livestreaming e-commerce, and virtual communities. Third, future studies could introduce additional individual-level variables, such as environmental awareness, income level, and technological trust, to provide a more comprehensive explanation for differences in purchasing intentions. Fourth, future research may attempt to combine big data analysis, text mining, and experimental designs to enhance the empirical depth and external validity of the research.

In summary, this article not only enriches the theoretical research on the intersection of ESG and digital marketing, but also provides useful references for new energy vehicle companies to develop sustainable marketing and communication strategies in practice.

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