The research on greenwashing brands’ rebuilding strategies and mechanism of brand trust after biochemical and other pollutions

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ABSTRACT

In present China with incremental environmental problems after biochemical and other pollutions, many companies create many green brands to enhance their competitive advantage. However, many greenwashing brands can’t keep their words about their green commitments. Thus they are facing a trust crisis. Now, the problem they need to solve is how to rebuild the trust. But the extant green brand and biochemical and other research ignored overall social support (legitimacy) on brand trust, and trust rebuilding from an impression management perspective. Therefore, this study, from the impression from management perspective, uses legitimacy, greenwashing, and green brand theories to analyze the trust rebuilding strategies and mechanism. The results from four experiments show that: (1) trust rebuilding mechanism, in which green brand greenwashing has a negative impact of legitimacy which has a positive impact on brand trust; (2) trust rebuilding strategies, in which the innocence defending and positive improvement can enhance brand trust of greenwashing brands. These interesting findings can not only enrich extant brand management and green marketing, but also provide vital implications to green brand companies.

KEYWORDS

Greenwashing brands; Biochemical and other pollutions; Legitimacy; Impression management; Trust rebuilding strategies.
INTRODUCTION

Since 2010, the environmental problems after biochemical and other pollutions have become increasingly prominent in China, while haze and water pollution are the focus of whole social. Customers’ demand for environmental-friendly products is increasing and willing to pay higher price for them. Many famous companies create their own green brands to cope with the environment stress, gain competitive advantage, improve corporate impression, seek new market and enhance brand value. Green brands are those brands that consumers associate with environmental conservation and sustainable business practices. In 2007, Mintel global database shows 328 brands implement the greening of entire production process while only five green brands in 2002 (Crowley, 2008). While Interbrand published the list of “Best Global Green Brands” (Interbrand, 2012), “INFZM” in China released “The Greenwashing List in 2013” which revealed the trust crisis arising from greenwashing of “green” brands. Greenwashing here refers to the integration of two corporate behaviors: poor environmental performance and positive communication about environmental performance (Delmas & Burbano, 2011). The trust crisis will make green brands at risk or the loss of brand equity (Cai Donge, 2011). Then, while the wide-spread of green brands, the public have deep suspicious of their behavior: are green brands really what they preach and is trustworthy (Roth, 2010)?

Therefore, seeking the rebuild strategy of green brand trust is the key to solve trust crisis. And institutional environment is essential for the development of green brand trust, can be seen from the following market reactions:

- Unilever and Starbucks were not recognized by the public, raised the perception and trust problem of customers, resulting in loss of brand equity (Roth, 2010).
- Hayao (the biggest Chinese Pharmaceutical Manufacturers), Wal-Mart, Nike lost customers’ trust for the failures to obtain green certifications, and resulted in potential brand risk (Cai Donge, 2011);
- Toyota, 3M and Siemens gained customers’ trust and higher outcomes for obtaining good communication and recognition with environmental friendly organizations (Cai Donge, 2011).

These reactions above show that the institutional environments give rise to the trust crisis of green brands (Roth, 2010; 2010). Green brand trust strategy is to “obtain and extend legitimacy, maintain the existing legitimacy, make up the lost or threatened legitimacy” (O’Donovan, 2002). That means to enhance green brand trust not just from the micro-local environment, but also to get the overall support and fit of institution from the government, the public, the media, and customers (Kates, 2004). So, an urgent problem appears how to gain the social support (brand legitimacy) to improve green brand trust?

The impression management is one important method to solve the loss of legitimacy in institutional theory. It is very necessary and important to shed light on green brand trust from an impression management perspective in the condition that customers have no consensus and lose trust of green brand (Roth, 2010). Therefore, this study introduces the legitimacy of institutional theory, uses the theories of greenwashing, green brand and brand trust to analyze the effect strategies and mechanism of green brand trust from an impression management perspective. Then, applies the experimental methods to verify the strategies and mechanism of green brand trust, guides the greenwashing brands to improve brand trust effectively.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

1 The effect mechanism of geenwashing brand on brand trust

According to the three levels of institution, that is, regulatory, normative, and cognitive levels (Scott, 2001), the drivers of greenwashing include: nonmarket external drivers (regulatory and monitoring context: lax and uncertain regulatory environment; activist, NGO and the media monitoring),
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market external drivers (consumer demand, investor demand and competition pressure), organizational drivers (firm characteristics, incentive structure and culture, effectiveness of intra-firm communication and organizational inertia), individual psychological drivers (optimism bias, narrow decision framing, hyperbolic intertemporal discounting) (Delmas & Burbano, 2011). They also proposed appropriate management strategies to reduce false communication of greenwashing firms: to increase the transparency of environmental performance; to enhance the understanding of greenwashing and effective coordination of intra-firm structures, processes and incentives (Delmas & Burbano, 2011).

Currently, a firm and its brand are parts of economics and institutional environment (Kates, 2004). Legitimacy is derived from institutional theory, which refers to a generalized perception or assumption that the entity actions are desirable, proper and appropriate within some socially constructed system of norms, values, beliefs and definitions (Suchman, 1995; Higgins & Gulati, 2006). Legitimacy was divided into three types: pragmatic, moral, and cognitive. Brand legitimacy refers to a general perception or assumption that the actions or strategies of brand are justified, proper or appropriate within the social system of norms, values, beliefs, and definition (Suchman, 1995; Kates, 2004). Brand legitimacy was also classified to three types. Pragmatic legitimacy means to benefit the audiences in various forms and is a transaction outcome of organizations or individuals (brands) with constituents (Suchman, 1995). For example, if the greenwashing brand provides new environmental technologies and additional environmental support to the government, supply chain enterprises and customers, it will do well to ensure pragmatic legitimacy. Moral legitimacy reflects a positive judgment and evaluation of organizations or individuals (brands) and their actions (Suchman, 1995). For example, the greenwashing brand made an apology and a timely response for its greenwashing behavior to maintain its moral legitimacy. Cognitive legitimacy refers to the comprehensibility and taken-for-grantedness of organizations or individuals (brands) and their actions (Suchman, 1995; Kates, 2004). It represents the most powerful sources of legitimacy, as it has unimaginable replacement of existing ideas. For example, the greenwashing brand gained the international authoritative green certification to increase taken-for-grantedness, and then its cognitive legitimacy will also improve.

Moreover, trust issue of greenwashing should be most worried about. Trust was the confidence level of anticipated behavior of another party (Hart & Saunders, 1997). Previous studies suggested that trust includes three beliefs: honesty, benevolence and reliability (Blau, 1964; Schurr & Ozanne, 1985). Some companies make some misleading or confusing green slogans, and exaggerate the environmental performance in the promotion of new products or brands, consumers will no longer believe their brands (Kalafatis & Pollard, 1999). Based on the research of Moorman, Zaltman & Deshpande (1992), Morgan & Hunt (1994), Chaudhuri & Holbrook (2001), brand trust is defined as: a dependence intention of consumers that is a dependence on a green brand ability to perform the expected abilities. Then, this study defines green brand trust as a dependency intention on beliefs or expectations based on the credibility, benevolence and ability of environmental performance. This trust issue not only comes from the consumers, also from public, government, peers, media and other social groups.

First we should know the relationship between greenwashing behavior, legitimacy and brand trust. Greenwashing is actually the behavior that firms maintain legitimacy with important external constituents by buffering internal routines from external uncertainties to enhance flexibility (Meyer & Rowan, 1977). Thus, the greenwashing of “green” brands are symbolic environmental protection behaviors with no environmental protection behavior or failure to fulfill environmental protection commitments, to alleviate the external public pressures and uncertainties and to avoid the conflict with external constituents. Some brands want to meet the demands of consumers and cope with stress from governments and constituents, but fail to reach the green commitments, which give rise to the inconsistent of commitments and practices. Then the greenwashing behavior is generating. When some green brands can’t achieve the demand of “green” product, industry environment standards and government environmental protection requirements, etc, these behaviors will influence take-for-
grandness of external constituents (cognitive legitimacy), their positive evaluation (moral legitimacy),
and constituents’ interests from environmental protection (pragmatic legitimacy).

According to legitimacy theory, enhancing the social support and fit of brand can improve brand
trust\textsuperscript{[2]} \cite{2010; Kates, 2004}. Brand legitimacy is to gain social support and fit by improving pragmatic
legitimacy, moral legitimacy, and cognitive legitimacy. So brand legitimacy plays an important part in
obtaining, maintaining, and improving green brand trust. If greenwashing brands can gain the supports
from social constituents, for example, getting the media rapport and institutional certification, it will
improve brand trust in the greenwashing crisis.

Above all, the greenwashing behaviors of brand are always “words not matched by deeds”,
which will inevitably cause the direct loss of consumer trust to the brand. Meanwhile, the greenwashing
brand can improve brand trust of consumers through achieving social fit and support. In addition,
Chen\textsuperscript{[2]} also pointed out that green brand trust is an important factor influencing green brand equity.
H1: The “greenwashing” of green brand has a negative impact on brand legitimacy.
H2: The legitimacy of greenwashing brand has a positive impact on brand trust

Customers assess a brand’s legitimacy based on its passive conformance to social. The firm or
brand managers can actively shape the way in which these stakeholders view the firm. Firms often use
stakeholder meeting, press releases, annual report and other corporate or brands information to influence
insiders’ and outsiders’ perception of their firm \cite{Brown, 1997}. Impression management strategies
include the disclosure of environmental liabilities and the expression of environmental commitment,
which often used to influence stakeholder perceptions\textsuperscript{[4]}. These specific impression management tactics
of positive improvement inevitably affect brand legitimacy and trust.

In addition, institutional conformity and decoupling is also used in impression management,
which would facilitate spokespersons’ efforts and support the innocence defending strategy (defenses of
innocence and justifications)\textsuperscript{[5]}. For example, the spokesman in Figure 1 engaging in impression
management states that they did not support illegitimate actions and should not be responsible.
Justification claims the events are not bad, inappropriate or unwelcome \cite{Tedeschi and Reiss, 1981}. Institutional conformity contributes to a more reasonable justification which shifted attention away from
the controversial actions and toward the socially desirable goals\textsuperscript{[5]}. Both two tactics shift the public's
attention from the negative of event (such as greenwashing) to the positive, so brands are considered to
be reasonable, responsible and trustworthy.

This paper focuses on four impression management tactics which can improve brand legitimacy:
the disclosure of environmental liabilities and the expression of environmental commitment\textsuperscript{[4]}
and defenses of innocence and justifications\textsuperscript{[5]}. As a result, we propose:
H3: Innocence defending strategy of impression management has negative impact between
greenwashing and green brand legitimacy.
H4: Positive improvement strategy of impression management has negative impact between
greenwashing and green brand legitimacy.

Based on greenwashing definition of Delmas & Burbano (2011), the greenwashing behavior of
Meyer & Rowan (1977) and impression management theory of Pratima & Clelland\textsuperscript{[4]}, combining with
the process model of Kimberly & Sutton\textsuperscript{[5]}, this paper proposes a conceptual model (Figure 1).
EXPERIMENTAL DESIGN AND HYPOTHESIS TEST

According to customer-based brand equity theory of Aaker\cite{1} and Keller (1993), the controllability of experiments and research focus, we use experimental methods to collect data, test hypotheses and research framework.

Experiment 1: Effects of greenwashing on green brand legitimacy

1 Experimental design
(1) This experiment designed the between-group model of one single factor (greenwashing of green brand: low vs high greenwashing). First, we randomly divided participants into high and low greenwashing group, gave them textual description of greenwashing degree, and asked them write down their informed greenwashing behavior. We rated the greenwashing level of two groups with five scales to have the manipulation check. Then, the participants were told attending an activity about understanding greenwashing. We showed some greenwashing brands, explained their greenwashing actions to participants, and asked them to answer a questionnaire of green brand legitimacy which was based on the scale of Pratima & Clelland\cite{4}. After knowing one greenwashing brand, one questionnaire should to be filled out. The questions are: "The brand's environmental performance is satisfactory"; "The brand's environmental performance is appropriate"; "The brand’s environmental performance is benefit to the public "; "The brand's environmental performance is conform to industry and social norms"; "The brand's environmental performance is consistent with your intuition "; "The brand's environmental performance is consistent with your cognition ".

2 Results and discussion
(1) Manipulation check. Results of manipulation check about greenwashing level showed the grouping was successful (t=2.624, p<0.01). Mean value of perceived greenwashing in high group was 4.28, which higher than 2.32 in low group.
(2) Green brand legitimacy. We took greenwashing level as grouping variable, conducted an independent-samples t-test on the test variable of green brand legitimacy. Mean value about green brand legitimacy of low group was 4.46, which significantly higher than 2.28 of high group. This result showed that the difference between two groups was very significant (t=3.768, p <0.01). That meant greenwashing had a negative impact on green brand legitimacy. Thus, H1 was verified.
Figure 2: Brand legitimacy at the high/low level of greenwashing

Figure 2 showed green brand legitimacy was down in consumers' minds when greenwashing level was high, and legitimacy was up when greenwashing level was low. Because public really hated greenwashing and considered to be deceived by the inconsistent behavior of words and deeds. The bad emotions had a negative impact on the interests, ethical and cognitive. This was what H1 have proved and lays the foundation for the impression strategy research of rebuilding trust.

Experiment 2: Effects of green brand legitimacy on brand trust

1 Experimental design

(1) This experiment designed the inter-group model of one single factor (green brand legitimacy: low vs high legitimacy). First, we randomly divided the participants into high and low legitimacy group, gave them textual description of legitimacy degree, and asked them write down their informed legitimacy situation. We rated the legitimacy level of two groups with five scales to have the manipulation check. Then, the participants were told attending an activity about understanding greenwashing. We showed some greenwashing brands, explained their legitimacy actions to participants, and asked them to answer a questionnaire of green brand trust which was based on the scale of Chaudhuri & Holbrook (2001). After knowing one greenwashing brand, one questionnaire should be filled out. The questions are: "I trust this brand"; "I rely on this brand"; "This brand is honest"; "The brand is safe".

2 Results and discussion

(1) Manipulation check. Results of manipulation check about legitimacy level shows the grouping is successful (t=3.281, p<0.01). The mean value about perceived legitimacy of high group was 4.36, which higher than 2.01 of low group.

(2) Green brand trust. We took legitimacy level as a grouping variable, conducted an independent-samples t-test on the test variable of green brand trust. Mean value about green brand trust in high group was 4.16, which significantly higher than 2.03 in low group. This result showed that the difference between two groups was very significant (t=3.652, p<0.01). That means legitimacy had negative impact on green brand trust, thus H2 was verified.

Figure 3: Brand trust at the high/low level of legitimacy

Figure 3 showed the green brand which had high legitimacy meant its social fit was high, also meant that the brand performed well in meeting the interests of stakeholders, industry evaluation and
public awareness. So the public especially consumers were more confident in this brand. The green brand with low legitimacy got the opposite responses. This was what H1 wanted to prove.

According to results of experiment 1 and 2, we could clearly see the effect path of "greenwashing" brand to regain brand trust, greenwashing had negative impact on brand legitimacy, and legitimacy has positive impact on brand trust. This lays the foundation for the rebuilding trust research of greenwashing brand.

**Experiment 3: Effects of impression management strategy (innocence defending) on greenwashing of green brand**

1 Experimental design

To verify H3, this experiment designed the inter-group model of 2 (greenwashing level: high vs low greenwashing) * 2 (innocence defending strategy in impression management: high vs low innocence defending). We invited students of Wuhan University as participates. First, we conducted the similar startup operation in experiment 1 and 2, and told participants they were attending an activity about understanding greenwashing of green brands. They were randomly divided into two groups (high vs low innocence defending). Then, we showed them the words and pictures of greenwashing brands which taking different level of innocence defending, and asked them to answer a questionnaire of green brand legitimacy.

Brand legitimacy. In high/low innocence defending group, participants would see the high/low level of innocence defenses and justifications for green brand greenwashing. After participants completed brand legitimacy questions, they were required to answer following questions: "You think the justifications of this brand is innocence"; "You think the justifications of this brand is credible"; "You think the justifications of this brand is convincing" (1 = strongly disagree, 5 = strongly agree).

Then, we took the mean of above three items as the distinction indicator of brand innocence defending level. The higher of the value, the higher of innocence defending level was. In pre-test, the innocence defending level of high group (M = 4.28) was higher than the low group (M = 1.98) (t = 3.866, p <0.01), in line with pre-test requirements.

The methods of measuring greenwashing and brand legitimacy were the same with Experiments 1 and 2.

2 Experimental results

Manipulation check

Innocence defending strategy. We conducted an independent-samples t-test on innocence defending, the results showed the evaluation of high group was higher than the low group (M_h = 4.58 and M_l = 2.16, t = 3.258, p <0.01).

Green brand greenwashing. Manipulation check of green brand greenwashing showed that the grouping of greenwashing is successful (t = 8.932, p <0.001), the evaluation of high greenwashing group (M=4.12) was better than low group (M=2.68).

(2) Brand legitimacy analysis

We had the variance analysis taking green brand greenwashing and innocence defending as fixed factor, green brand legitimacy as dependent variable, the results showed that the interaction effect of greenwashing and innocence defending was significant (F=6.352, p <0.01). Innocence defending had a significant effect on brand legitimacy (F=7.243, p<0.01), green brand greenwashing has a significant negative effect on brand legitimacy (F = 5.628, p <0.01).
Figure 4 showed for high greenwashing brands there was no difference in brand legitimacy whatever the level of innocence defending \( (M_h=1.96, \ M_l=2.08, \ t=0.206, \ \text{not significant}) \). For low greenwashing brands, brand legitimacy with high innocence defending was higher than low innocence defending \( (M_h=4.01, \ M_l=2.86, \ t=2.361, \ p<0.01) \), thus H3 was verified.

Experimental results proved that impression management strategy (innocence defending) had moderate effects between greenwashing and brand legitimacy. Brand of low greenwashing got litter negative impact because the public felt that the brand was extenuating. For the extenuating circumstances (innocence defending), this brand certainly got more social support and recognition than high greenwashing brand. In addition, the inconsistent behavior of words and deeds of high greenwashing brand caused harm to society and environment, so it would not get sympathy, also social support and recognition (brand legitimacy) whatever the level of its innocence defending.

**Experiment 4: Effects of impression management strategy (positive improvement) on greenwashing of green brand**

1 Experimental design

To verify H4, this experiment designed the inter-group model of 2 (greenwashing level: high vs low greenwashing) * 2 (positive improvement strategy in impression management: high vs low positive improvement). We invited students of Wuhan University as participants. First, we conducted the similar startup operation in experiment 3, and told participants they were attending an activity about understanding greenwashing of green brands. They were randomly divided into two groups (high vs low positive improvement). Then, we showed them the words and pictures of greenwashing brands which taking different level of positive improvement, and asked them to answer a questionnaire of green brand legitimacy.

Brand legitimacy. In high/low positive improvement group, participants would see the high/low level of environmental liabilities disclosure and environmental commitment expression for green brand greenwashing. After participants completed brand legitimacy questions, they were required to answer following questions: "You think the disclosure of environmental liabilities is clear"; "You think the disclosure of environmental liabilities is good"; "You think the expression of environmental commitment is clear"; "You think the expression of environmental commitment is good" (1=strongly disagree, 5=strongly agree).

Then, we took the mean of above four items as the distinction indicator of brand positive improvement level. The higher of the value, the higher of positive improvement level was. In pre-test, the positive improvement of high group \( (M=4.26) \) was higher than the low group \( (M=2.08) \) \( (t=4.382, \ p<0.01) \), in line with pre-test requirements.

The methods of measuring greenwashing and brand legitimacy were the same with Experiments 1 and 2.

2 Experimental results

Manipulation check
Positive Improvement Strategy. We conducted an independent-samples t-test on positive improvement, the results showed the evaluation of high group was higher than the low group (Mh=4.24 and Ml=2.26, t=4.125, p<0.01).

Green brand greenwashing. Manipulation check of green brand greenwashing showed that the grouping of greenwashing is successful (t=4.082, p<0.01), the evaluation of high greenwashing group (M=4.28) was better than low group (M=2.52).

(2) Brand legitimacy analysis

We had the variance analysis taking green brand greenwashing and positive improvement as fixed factor, green brand legitimacy as dependent variable, the results showed that the interaction effect of greenwashing and positive improvement was significant (F=5.326, p<0.01). Positive improvement had a significant effect on brand legitimacy (F=6.532, p<0.01), green brand greenwashing had a significant negative effect on brand legitimacy (F=6.268, p<0.01).

Figure 5: Brand legitimacy in different positive improvement at the high/low level of greenwashing

Figure 5 showed for high greenwashing brands there was no difference in brand legitimacy whatever the level of positive improvement (Mh=2.56, Ml=2.68, t=0.062, not significant). For low greenwashing brands, brand legitimacy with high positive improvement was higher than low positive improvement (Mh=4.36, Ml=3.18, t=3.582, p<0.01), thus H4 was verified.

Experimental results proved that impression management strategy (positive improvement) had moderate effects between greenwashing and brand legitimacy. Brand of low greenwashing got litter negative impact because the public felt that the brand could be forgiven. With the high level of environmental liabilities disclosure and environmental commitment expression, this brand certainly got more social support and recognition than high greenwashing brand. In addition, the inconsistent behavior of high greenwashing brand caused harm to society and environment, so it would not get social support and recognition (brand legitimacy) no matter how clear or good the environmental liabilities disclosure and environmental commitment expression is.

CONCLUSIONS AND DISCUSSION

Recently, with incremental environmental problems after biochemical and other pollutions in China, smog, water pollution, food safety and other issues caused consumers to be increasingly concerned about green brand and in favor of green brand. Thus, in order to meet consumers’ demands, many firms have introduced varieties green brands which bring great benefit for social, business, consumers. But the emergence of "greenwashing" phenomenon (the enterprise in order to deal with institutional pressure, taking the inconsistent behavior patterns of actual operations and commitments, Meyer & Rowan, 1977) confuses consumers about green brands, and seriously affecting green brand trust.

However, extant research on green brands is always from a green marketing while silent on the institutional view on the trust rebuilding of greenwashing brands. Therefore, this article from an impression management perspective uses legitimacy, greenwashing, and green brand theories to analyze the trust rebuilding strategies and mechanism. Through data analysis and experimental verification, we
find that: (1) greenwashing of green brand has a negative impact on brand legitimacy; (2) The legitimacy of greenwashing brand has a positive impact on brand trust; (3) the innocence defending tactics (defense of innocence and justifications) of impression management can improve brand legitimacy, thus enhance brand trust; (4) The positive improvement tactics (disclosure of environmental liabilities and expression of environmental commitment) of impression management strategy also can improve brand legitimacy, thus enhance and rebuild brand trust as the innocence defending strategy.

Therefore, from the findings of this paper, greenwashing brand should not only from the general marketing, but also from the whole social support and fit to explore its brand rebuilding trust strategies and mechanisms. Besides using marketing methods such as 4P, companies should pay attention to the impact of other stakeholders, gain their support and recognition from interests, moral and cognitive level to obtain brand legitimacy, thereby improving greenwashing brand trust. In addition, greenwashing brand strategy can use innocence defending strategy to guide public opinion and reduce harm of greenwashing, then improve its brand trust. Furthermore, greenwashing brand can also use positive improvement strategy, express its true sincerity on disclosure of environmental liabilities and expression of environmental commitment, which also reduce harm of greenwashing, then improve its brand trust.

Finally, this study is aimed at greenwashing brand trust problems after biochemical and other pollutions in China. In fact, it can be extended to other countries and has comparison with Chinese studies, and cross-cultural research is also necessary. The study about rebuilding trust strategy of greenwashing brand from an impression management perspective is clearly insufficient, future studies could consider studying from other multi-view. In addition, this study focused on the field of B2C market, the same greenwashing issue after biochemical and other pollutions in B2B market which is also worthy of further study.

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