



Uncertainty Unleashes the Belonging Bug: How Pandemic Threat Makes Consumers Crave Cause-related Products

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Abstract. Companies donating a certain amount of money to a selected cause responding to each consumer purchase is known as cause-related marketing (CRM) that has become very popular and has grown exponentially in the past few decades. However, when faced with pandemic threat, what happens to consumer preference for cause-related products (CRPs)? Little research has explored how pandemic threat influences consumers' preference for CRPs. To address the gap, we analyze the issue based on the uncertainty-identity theory. The results show that pandemic threat increases consumers' preference for CRPs, and the perception of uncertainty and need to belong plays a chain mediating role between pandemic threat and preference for CRPs.

Keywords: Pandemic threat; perceived uncertainty; need to belong; CRPs.

1 Introduction

Although scholars have conducted abundant research on what affect consumers' purchasing intention of CRPs. However, most of them are based on everyday consumption scenarios. When consumers are confronted with pandemic threat, will their preference for CRPs change? The current research proposes that when consumers encounter pandemic threat, they suffer from uncertainty. Uncertainty-identity theory demonstrates that when individuals perceive uncertainty, they tend to figure out which group they identify with and belong to, and finally reduce uncertainty through self-categorization and deindividuation [1]. Individuals at this stage exhibit a heightened need for belonging and strongly desire to be accepted by others. To be better accepted by others, individuals usually discipline their behavior according to values and norms approved of by others, and sometimes even at the expense of their own interests. Research has shown that individuals tend to think of objects as part of self-extension [2], and products have symbolic and symbolic value to manifest themselves [3]. Purchasing CRPs is a pro-social behavior. Therefore, we suggest that pandemic threat arouses people's sense of uncertainty, which triggers the need to belong, and thus increases preference for CRPs.

2 Theoretical Background and Hypothesis Summary

2.1 Pandemic Threat

A pandemic is an epidemic disease that occurs in a very wide area where most people lack immunity, affects many people, and can easily spread across international borders and have a significant impact. Pandemics have a profound impact on our daily and social life in various ways and results in a great negative effect on people's mental health. Vardanjani et al (2021) [4] and Tobaldini et al (2017) [5] found that people report high levels of anxiety, anger, insomnia, nervousness and uncertainty due to social distancing and isolation during a pandemic. Fear of viral infection and financial uncertainty both increase various negative emotions [6]. We propose that pandemic threat refers to the feeling of anxiety, anger, fear and other emotions when individuals are exposed to pandemic-related information, and realize that their health, work, study and life may be uncontrollable and unpredictable due to the spread of pandemic.

2.2 Cause-related Products

CRM belongs to the strategies employed by the companies to bear social responsibility. Generally, for a certain period, each time consumers purchase CRPs, the enterprise donates a certain amount of money to a chosen cause according to its prior commitment [7], among which the products are associated with a cause are called CRPs.

The antecedents of CRM have various influences on consumers' responses, so it is necessary to define the antecedents that influence the effectiveness of CRM and determine its effect size for the success of CRM strategy. The antecedent variables can be divided into consumer characteristics, corporate characteristics, and cause characteristics [8]. It is not difficult to find that there are few studies on discussing how external threats affect the purchase intention of CRPs. Therefore, it is necessary to fill this research gap and expand the research scope.

2.3 The Chain Mediating Effect of Perceived Uncertainty and Need to Belong

Pandemics leave people feeling a great deal of uncertainty. They are uncertain about whether they will be infected with such a pandemic and how it will affect their study, work and lifestyle. Uncertainty makes it difficult for individuals to predict and plan behaviors, which is disgusting and uncomfortable [9] and brings about individuals' dual emotional and cognitive responses, so people always try to reduce, control or avoid its occurrence [10]. Reducing uncertainty belongs to individuals' basic psychological motivations [9]. To reduce the uncertainty stemmed from external threats, people are inclined to seek each other's support to gain more chances of survival [11]. Research has found that in the evolutionary process, threats including dangers, diseases and natural disasters have enhanced mankind's mutual needs.

An individual's need to belong refers to their desire to belong to certain organizations or to certain groups, and to develop and maintain positive interpersonal relationships.

[12]. The uncertainty-identity theory posits that when people experience uncertainty, they can lessen their sense of uncertainty by determining the group they identify and belong to through self-categorization and deindividuation. In the context of the current research, when consumers are exposed to pandemic threat, they are full of uncertainty about whether they will be infected with the pandemics, the consequences of infection, and how to deal with the pandemics, and the perception of uncertainty will trigger consumers' need to belong. A sense of belonging can be re-established through non-social goals [13]. Previous research indicates that individuals who attach importance to belonging have a greater preference for social acceptance. A strong sense of the need to belong might prompt individuals to display cooperative or other prosocial actions.

Prosocial behavior refers to individual behaviors that meet social expectations and are beneficial to others and society. Chang et al. (2020) [14] proposed that purchasing CRPs is a prosocial behavior. It is through consumer purchases of CRPs that businesses increase sale volume, sales, and profits, nonprofit organizations receive pledged donations [15]. Based on this, we propose H1 and H2.

H1: Pandemic threat positively affects consumers' preference for CRPs.

H2: Perceived uncertainty and the need to belong act as a chain mediating factor between pandemic threat and preference for CRPs.

The two research hypotheses are summarized in the theoretical framework shown in Figure 1.

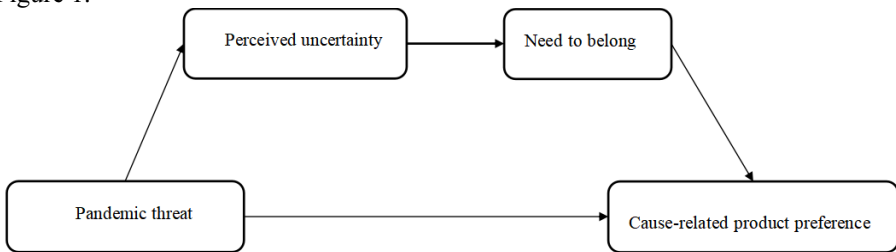


Fig. 1. Theoretical framework.

3 Study Design and Result Analysis

3.1 Experiment 1

The aim of Experiment 1 was to test H1 that pandemic threat enhances consumer preference for CRPs.

Participants and experiment design: Eighty-six participants from wjx.cn participated in experiment 1. Participants were randomly assigned to either pandemic threat group or control group. After completing experiment 1, each participant received a red envelope of 2 yuan in return.

Experiment procedure: First, pandemic threat was manipulated following Huang and Jaideep (2020) [16], with participants in the pandemic threat reading article related to five major historical pandemics (smallpox, Spanish flu, Bubonic plague, malaria, and cholera). After reading the article, the participants in the pandemic threat group were

required to record their emotions in case pandemic diseases occurred in their community. Participants in the control group read articles that described how a student organized the workshop [16]. After reading the material, participants in the control group were asked to write down how they would feel if they were to organize their workshop. Next, measure participants' product preference. The participants were told that there were two types of mineral water. The one promised to donate part of its income to the cause "Children's Education in Poor Mountainous Areas" (mineral water B). The other (mineral water A) did not make such a promise. The participants report preference degree for the two types of mineral water according to their current preference (1 = completely like mineral water A, 8 = completely like mineral water B). Then, participants filled in the answer attention test items based on the articles they had read. The pandemic threat group's attention test item was "which pandemic is not mentioned in the article above"; the attention item in the control group was: "what did the student organize first in the passage?". Later, ask participants "to what extent that you feel pandemics pose a threat to the health and life of you (1 = very little, 7 = very much). Finally, the participants filled in the relevant personal information to complete all the surveys.

Results analysis: Five participants failed the attention test, so the remaining 81 participants ($M_{age} = 30.44$, female = 55.56%) were analyzed. The perception of pandemic threat in the pandemic threat group ($M = 6.18$, $SD = 1.20$) was significantly higher than that in the control group ($M = 4.08$, $SD = 1.15$; $t(79) = 8.05$, $p < 0.001$), which indicated a successful manipulation of the pandemic threat. CRP preference was the dependent variable, and pandemic threat was the independent variable in a one-way ANOVA. The results indicated that the preference of participants in the pandemic threat group for CRPs ($M = 7.65$, $SD = 1.50$) was notably higher than those in the control group ($M = 6.42$, $SD = 2.43$; $F(1,79) = 7.70$, $p = 0.01$), as depicted in Figure 2. H1 was supported.

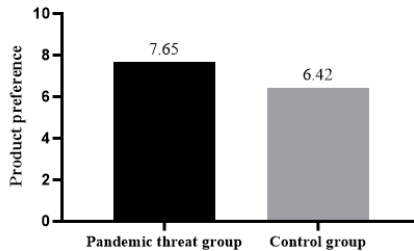


Fig. 2. The impact of pandemic threat on preference for eco-friendly products.

3.2 Experiment 2

In experiment 2, perceived uncertainty and a need to belong were tested as mediating factors between pandemic threat and consumers' preference for CRPs.

Participants and experiment design: Ninety-five participants from wjx.cn participated in experiment 2. Participants were randomly assigned to either pandemic threat group or control group. After completing the experiment, each participant received a red envelope of 2 yuan in return.

Experiment procedure: First, pandemic threat was manipulated following Huang and Jaideep (2020) [16], with participants listening to a news report related to smallpox. After listening to the materials, participants in the pandemic threat group were required to write down how they would feel if the smallpox broke out in their community. Participants in the control group listened to a news report related to cardiovascular disease. After listening to the report, the control group was asked to write down how they felt and thought if there were multiple cardiovascular and cerebrovascular cases around them. Next, measure participants' product preference. The participants were informed that there were two types of yogurts. One promised to donate part of its income to "Caring for Left-behind Children" (yogurt A). The other (yogurt B) didn't make that promise. The participants reported preference degree for the two yogurts according to their current preference (1 = completely like yogurt A, 8 = completely like yogurt B). Then, the participants were required to report their perceived uncertainty [17-18] and need to belong [19]. In addition, participants were asked "to what extent that you feel pandemics pose a threat to the health and life of you" (1 = "very little" and 7 = "very much"). After that, participants filled in relevant personal information and completed the attention test items. The attention test item for the pandemic threat group was "which of the following is not a symptom of smallpox"; the attention item of the control group was "what is the trend of the death rate from cardiovascular diseases?" Finally, the participants filled in the relevant personal information to complete all the surveys.

Results analysis: Nine participants failed the attention test, and the remaining 86 participants were analyzed ($M_{age} = 35.97$, 46.51%female). The perceived pandemic threat in the pandemic threat group ($M = 5.44$, $SD = 1.26$) was significantly higher than that in the control group ($M = 3.05$, $SD = 1.99$; $t(84) = 3.69$, $p < 0.001$), indicating successful manipulation of the pandemic threat. The perceived uncertainty ($\alpha = 0.89$) and need to belong ($\alpha = 0.97$) scales had good reliability. To facilitate reading, the CRPs and control products are reversely coded in the result analysis. The results showed that the preference for CRPs in the pandemic threat group ($M = 5.90$, $SD = 1.08$) was significantly higher than that in the control group ($M = 4.41$, $SD = 2.00$; $F(1, 84) = 18.36$, $p < 0.001$), as shown in Figure 3. Thus, H1 is supported again.

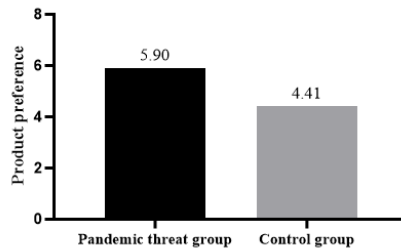


Fig. 3. The impact of pandemic threat on preference for eco-friendly products.

Mediation analysis: Analysis of variance (ANOVA) for perceived uncertainty revealed a notable difference between the pandemic threat group and the control group ($F(1,84) = 20.45$, $p < 0.001$). Participants in the pandemic threat group ($M = 5.77$, $SD = 1.00$) had a greater perception of uncertainty compared to those in the control group

($M = 4.27$, $SD = 1.93$). Likewise, ANOVA for need to belong also showed a significant difference between the two groups ($F(1,84) = 18.80$, $p < 0.001$). Participants in the pandemic threat group ($M = 5.82$, $SD = 0.97$) had a stronger perception of the need to belong than those in the control group ($M = 4.37$, $SD = 1.97$). A mediating analysis (Model 6) was carried out to explore the mediating role of perceived uncertainty and need to belong. Bootstrapping analysis (Hayes and Preacher 2014) demonstrated that perceived uncertainty and need to belong ($\beta = 0.89$, $SE = 0.26$; 95% CI : 0.42 to 1.44) play the chaining mediating effect.

4 General Discussion and Conclusion

4.1 Conclusion

In conclusion, cause-related marketing has seen remarkable growth over the past decades. Regarding consumer preference for cause-related products during a pandemic, which was under-researched, our analysis based on the uncertainty-identity theory shows that pandemic threat boosts such preference. The perception of uncertainty and the need to belong sequentially mediate the link between pandemic threat and preference for cause-related products.

4.2 Theoretical Contribution

First, the article identifies an important antecedent variable of consumer preference for the CRPs. Although previous studies have done a lot of research on the antecedents of consumers' interest in CRPs, they did not discuss the impact of pandemic threat on consumers' interest in CRPs. Second, it expands the significance of CRPs to consumers. The conclusions of this paper proved that, for consumers, CRPs can meet their need to belong and alleviate their uncertainty, which is in line with the research mentioned by Kim and Johnson (2013) [20] that the goal of CRM strategy is to influence consumers' emotions.

4.3 Practical Contribution

First, since pandemic threat can increase consumers' preference for CRPs, marketers should attach keen attention to the external environmental changes. When promoting and marketing CRPs, they should make adaptive marketing strategy adjustments at any time according to the external environment. Second, the need to belong can enhance consumers' preference for CRPs. Marketers should publicize their social value and significance more in the marketing process of CRPs, so that purchasing CRPs can become a way to meet individuals' need to belong.

4.4 Research Limitations and Prospects

This paper first discusses the uncertainty-identity theory's impact on consumer preferences for CRPs in the context of pandemic threat. It may, however, overlook other equally important theoretical frameworks, such as risk perception and social identity theory. These theoretical frameworks are worthy of further exploration in future research. Second, more external factors that may affect the results are not fully considered in experimental design, which should be considered in future experimental design. In this study, although mediating effects were examined, it may have been insufficient to fully account for other potential variables, such as emotional responses and social support. Researchers can explore potential variables in future studies. In addition, there may be some limitations in sample size and representativeness, which affect the universality and applicability of the research results. It is essential that future research increase sample size and improve sample representativeness to enhance universality and applicability of findings.

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