Summer 5-27-2016

The Effect of Co-creation Claim on Brand Identification: The Moderating Effects of Self-construal and Product Involvement

Changhui Ning
School of Business Administration, Zhongnan University of Economics and Law, Wuhan 430073, China, xinannan_lucky@163.com

Zhe Xue
School of Business Administration, Zhongnan University of Economics and Law, Wuhan 430073, China

Nannan Xi
School of Business Administration, Zhongnan University of Economics and Law, Wuhan 430073, China

Follow this and additional works at: http://aisel.aisnet.org/whiceb2016

Recommended Citation
http://aisel.aisnet.org/whiceb2016/16

This material is brought to you by the Wuhan International Conference on e-Business at AIS Electronic Library (AISeL). It has been accepted for inclusion in WHICEB 2016 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.
The Effect of Co-creation Claim on Brand Identification:

The Moderating Effects of Self-construal and Product Involvement

Ning Changhui¹, Xue Zhe², Xi Nannan³*
School of Business Administration, Zhongnan University of Economics and Law, Wuhan 430073, China

Abstract: This paper provides insight into the brand identity elements co-creation phenomenon and explores the effect of co-creation claim on brand identification. The paper also verifies the moderated effect of product involvement and self-construal. The experimental study and the analysis of variance demonstrate that co-creation claim is confirmed to influence brand identification positively. On the other hand, the self-construal moderates main effect of co-creation claim. However, this study suggests that the self-construal and product involvement can not moderate the main effect simultaneously.

Keywords: social media; brand co-creation; brand identification; product involvement; self-construal

1. INTRODUCTION

With the development of social media, such as weibo, WeChat, QQ, Twitter and Facebook et al, it is more convenient and frequent than ever before for companies and consumers to communicate with each other. As a result, the service-dominant logic compared to the product-dominant logic is becoming a popular marketing logic, in this logic, marketing is a process of doing things in interaction with the customer. The customer is primarily an operant resource, only functioning occasionally as an operand resource[1]. The change of customer role make the co-creation become the most promising areas in virtual internet environment[2]. However, in the previous studies, researches in co-creation field primarily focus on the effects towards those consumers who have participated in co-creation activities, such as maintaining strong relationships with enterprises, increasing loyalty, and spreading positive word of mouth[3]. Since most consumers just see the co-created brands rather than positively participate in the co-creation processes, more attention should be paid to those consumers who have not participated in the co-creation activities. In fact, simply obtaining the brand information without creating brand content may trigger a change in consumer based brand equity[4]. In spite of this, only few studies were conducted to investigate the effects of co-creation claim on consumers who have not participated the co-creation activities[5][6]. Meanwhile, the cognitive researches on co-creation mainly focus on products and advertising without considering other market offerings. Taken together, this study provides insight into co-creation of brand identity elements as well as explores the effect of co-creation claim on brand identification from the perspective of consumers who did not participate in brand co-creation activities. What’s more, the paper inspects the moderating effects of product involvement and self-construal.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1 The main effect of co-creation claim

According to social identity theory, any source-related characteristic that makes individual sustaining association with the source is expected to stimulate identification[7]. Previous studies emphasized the effect of the source similarity on identification because individuals tend to like people with similar characteristics[8]. To
be more precise, individuals perceive the attitudes held by similar others as more appropriate to them and are more interested in gaining and maintaining acceptance from similar rather than dissimilar others. Robert B. Cialdini (2006) proposed the principle of influence on others’ preferences and emphasized that similarities (in personality, background, lifestyle, interest, religion, politics, etc.) might make a favorable impression on persuader. Robert B. Cialdini (2006) believed that this kind of impression could become a powerful weapon to persuade others. Further, based on the meta-analysis of the effects of source similarity on persuasion found that, target audiences are more likely to identify with, and therefore adopt, the opinions of similar others. For instance, the salesman are able to sell more if customers assume they share the same interest. Besides that, even accidental similarity such as birthday or birthplace can also lead to higher purchase intention.

Admittedly, those who are not involved in creating brand collectively are expected to pay close attention to customers participated in brand co-creation activities. Comparing with professional brand marketers, these participating customers are treated as similar groups bringing social identity. Gradually, those consumers as non-participants in the co-creation activities are supposed to have positive evaluations towards co-creation brand and form brand identification. More precisely, Thompson and Malaviya (2013) found that co-creation claim can enhance the persuasion power of advertising and generate positive evaluation on brand under certain conditions. Lam et al. (2013) took Apple Inc. for an example and stated that the role of CEO would affect brand identification. The identification of Consumers towards Mr. Steve Jobs may lead to the emergency of identification with any new brands produced by Apple Inc.

On the other hand, in the minds of consumers acting as non-participants in co-creation activities, companies authorizing customers to actively participate in the new product development are perceived as more consumer-oriented and holding more sincere brand personalities. Obviously, co-creation behavior may affect brand association; and then consumers may make inferences based on the brand behavior. Moreover, individuals always expect for positive social identity as well as link themselves to the winner together, which can help them meet the demand of self-esteem under the light of others. Based on the discussion above, it can be predicted that co-creation claim may stimulate consumers to produce positive association such as consumer-oriented or sincere personality; then link themselves to the brand and form brand identification.

**H1:** Brand co-creation claim has a positive effect on brand identification for consumers who have not participated in co-creation activities.

### 2.2 Moderating effect of self-construal

Self-construal is often taken to be one of the fundamental theories to explain to what extent the individual has a sense of connectedness or unconnectedness with others. There are mainly two types of self-construal: independent self-construal and interdependent self-construal, respectively. On one hand, independent self-construal refers to individual’s autonomy and independence; individual tends to express his or her expectation, preference, feature and ability. Unlike independent self-construal, individual with interdependent self-construal is more likely to find the way to fit with others and become a part of the public. Generally speaking, he or she tends to be more open, keen to public affairs, and deal with issues in the perspective of others for keeping a harmonious relationship.

Self-construal influences how individual perceives his or her behavior of connecting with or separating from others. People with interdependent selves tend not to differentiate the self from close others. They are likely to be more attentive and sensitive to close others’ experiences than those with independent selves. By contrast, people with independent selves are motivated to separate oneself from others and regard themselves as different from, and better than, others.

Individual with independent self-construal is inclined to carry on analytical thinking, emphasize the independence of the individual objects while individual with interdependent self-construal often adopts
systematic thinking and urges that the world is made up of crisscross elements. Interdependent self-construal suggests that things should be understood in the entire related content\cite{22}. Systematic thinkers as opposed to analytical thinkers usually pay more attention to predicting the relationships among different things\cite{22}. Therefore, it is easy to conclude that individual with interdependent self-construal always adopts overall thinking and takes the whole situation into account. On the other hand, individual with independent self-construal trends to distinguish target object and other information, to a large extent\cite{23}.

Undoubtedly, when the individual with independent self-construal faces a co-creation brand, co-creator’s consumer identity cannot arouse individual’s psychological sympathetic chord because individual often believes that they are more distinctive and better than others. Analytical thinking will lead individual to treat co-creator and co-created brand separately; so, co-creator identity is relative weak factor influencing the attitude towards brand. In contrast, individual with interdependent self-construal prefers to keep sensitive and correlate with others. When facing a co-created brand, individual may pay more attention to the co-creator’s consumer identity and the relationship between co-creator and brand. In brief, co-creation claim has a greater impact on individual with interdependent self-construal.

**H2:** Self-construal moderates the effect of co-creation claim on brand identification.

**H2a:** To individual with interdependent self-construal, individual’s identification is stronger to the brand with the co-creation claim than that without the co-creation claim.

**H2b:** To individual with independent self-construal, there is no significant difference in brand identification between two different co-creation claim situations (with vs without).

### 2.3 Moderating effect of product involvement

Involvement is related to the consumer’s demand, value, interest and perceptive correlation of target\cite{24}. Several studies reported that involvement could be divided into high level and low level; besides, high-involvement consumer and low-involvement consumer have remarkable difference in consumption behavior\cite{25}. High-involvement consumers are willing to invest more time and energy to become an active seeker of information and maximize on information assets. Unlike high-involvement consumers scanning carefully the attitude and behavior towards specific products, low-involvement consumers prefer to adopt limited information processing model.

The term “product involvement” is often used to explain consumer behavior\cite{26}, especially purchase decision-making. Because this term can explain and analyze consumer purchasing decision to a greater extent. Product involvement refers to the level of a consumer’s interest in purchasing a certain type of product and how committed they are to purchase a given brand. Different levels of product involvement result in differences in many aspects including product information, purchasing way, attitude to product attributes, and brand loyalty\cite{24}. Generally speaking, the higher the degree of product involvement, the higher the sensitivity of consumers to the brand\cite{27}. By studying the purchasing behavior of alcohol product, Barber et al.\cite{25} (2007) found that there were significant difference between high-involvement consumers and low-involvement consumers in the views towards product label\cite{25}.

So, it may be predicted that, compared with low-involvement consumers, high-involvement consumers have higher sensitivity to co-creation brand, and pay more attention to the related information of brand and their similarity in identity to co-creator. At the same time, because high-involvement consumers spend more energy to scan the brand, they are more likely to develop brand association with customer orientation and sincere personality. In short, co-creation claim has a greater impact on high-involvement consumers.

**H3:** Both product involvement and self-construal moderate the effect of co-creation claim on brand identification.

**H3a:** In low-involvement context, no matter to individual with interdependent self-construal or
independent self-construal, there is no significant difference in brand identification between two different co-creation claim situations (with vs without).

**H3b:** In high-involvement context, to individual with interdependent self-construal, individual’s identification to the brand with the co-creation claim is stronger than that without the co-creation claim; to individual with independent self-construal; there is no significant difference in brand identification between two different co-creation claim situations (with vs without).

### 3. PRELIMINARY EXPERIMENTS

#### 3.1 The first preliminary experiment

The purpose of first preliminary experiment is to select the product category that the subjects are familiar with. This research adopted the 5-point Likert scales to determine the degree of product familiarity; the question is “How about your familiarity of X product?” The study issued a total of 80 questionnaires and after eliminating 14 invalid questionnaires, finally 66 valid questionnaires (38 women and 28 men, respectively) were collected. The product scored above 4 would be labeled with high familiarity. At last, it was found that, with the exception of electric toothbrush, intelligent hand ring and electric cars, the tested familiarity degrees in other seven types of products were all above 90% in 4 points. Therefore, the rest products would be tested in the next experiment. Researchers need to decide which two kinds of products are more appropriate for this study, respectively, with high involvement and low involvement.

#### 3.2 The second preliminary experiment

The second preliminary experiment is to choose two types of products which can better represent the high and low degree of involvement in the main experiment from the seven types of products. With the help of RPII scale [28], developed by Zaichkowsky in 1994, the research issued 80 questionnaires. After eliminating 9 questionnaires, 71 valid questionnaires (42 women and 29 men, respectively) were eventually obtained. The results showed that the Cronbach’s alpha of each product category was above 0.8, which indicated that the measurement had a high reliability. The average score for Mineral water was 37 which was the lowest. The mobile phone product had highest average score of 62. In addition, the two kinds of product involvement had a significant difference (T = 11.291, p = 0.000). Therefore, these two types of products would be selected as the high and low involvement product respectively. Specific results are shown in Table 1:

<table>
<thead>
<tr>
<th>Product category</th>
<th>Total scores</th>
<th>Average score</th>
<th>Cronbach’s alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>liquid shampoo</td>
<td>3716</td>
<td>52</td>
<td>0.834</td>
</tr>
<tr>
<td>toothpaste</td>
<td>3759</td>
<td>53</td>
<td>0.819</td>
</tr>
<tr>
<td>mobile phone</td>
<td>4414</td>
<td>62</td>
<td>0.933</td>
</tr>
<tr>
<td>mineral water</td>
<td>2627</td>
<td>37</td>
<td>0.829</td>
</tr>
<tr>
<td>sneaker</td>
<td>4284</td>
<td>60</td>
<td>0.859</td>
</tr>
<tr>
<td>detergent</td>
<td>3319</td>
<td>47</td>
<td>0.816</td>
</tr>
<tr>
<td>USB flash disk</td>
<td>3840</td>
<td>54</td>
<td>0.906</td>
</tr>
</tbody>
</table>

### 4. THE MAIN EXPERIMENT

#### 4.1 Method

The main experiment is to verify the three hypotheses mentioned above: the main effect of co-creation claim on brand identification and the moderating effects of self-construal and product involvement.
4.1.1 Design
For convenience of description, the main experiment adopted 2 (co-creation claim: with vs without) * 2 (the degree of product involvement: high vs low) factorial experiment design. By using the self-construal scale, subjects were divided into two parts, namely independent self-construal and interdependent self-construal. Finally, eight different experimental samples were obtained. The survey was conducted among a total of 272 college students including 98 men and 110 women, which resulted in 76.5% (208) sample return. Sample structure is showed in Table 2:

<table>
<thead>
<tr>
<th>Co-creation claim</th>
<th>Product involvement</th>
<th>Self-construal</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>independent</td>
<td>interdependent</td>
<td></td>
</tr>
<tr>
<td>with</td>
<td>high</td>
<td>28</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>low</td>
<td>25</td>
<td>26</td>
</tr>
<tr>
<td>without</td>
<td>high</td>
<td>28</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>low</td>
<td>26</td>
<td>24</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>107</td>
</tr>
</tbody>
</table>

4.1.2 Stimulants
The Huatang mobile phone and the Snow Weili mineral water were chosen as the high and the low involvement product respectively. Because both of the two brands are unknown in the market, the other factors which may result in brand identification are controlled as much as possible.

4.1.3 Variables
In this study, for controlling variability of co-creation claim, product pictures which contains co-creation claim were showed to the people tested (subjects) after watching a piece of virtual news about co-creation. In high-involvement situation, subjects were told that the logo of Huatang was designed by consumers while in low-involvement situation, subjects were told that the label of Snow Weili was designed by consumers. In contrast, experimental group wasn’t given any other information about the brand without co-creation, except for the brand name.

In order to verify the manipulation effect of product involvement, the study adopted the RPII scale developed by Zaichkowsky in 1994 to exert independent sample T test. The results showed that the average score of Huatang brand (M=54.5294) was significantly higher than that of Snow Weili brand representing low involvement group (M=25.5490), T=30.200, df=206, p<0.01. Thus, the manipulation of product involvement is appropriate.

The measurement of self-construal was on the basis of the IISS scale developed by Lu and Gilmour[31]. The results of paired sample T test showed that in independent self-construal group, the average score of independent self-construal (M=107.27) were significantly higher than that of interdependent self-construal (M=84.12), T= 111.305, df=106, p<0.01. In contrast, in the interdependent self-construal group, the average score of interdependent self-construal (M=96.79) is significantly higher than that of independent self-construal (M=72.21), T=89.410, df=100, p<0.01, suggesting that the manipulation of self-construal is successful.

The study adopted the Jijing’s scale in the perspective of Chinese culture[32] to measure the brand identification. After the multiple correction of Exploratory Factor Analysis by Jijing, this scale has a higher measurement reliability and validity.

4.2 Test of hypothesis
This study applies Analysis of Variance to test the main effect of co-creation claim on brand identification and verify the moderating effect of self-construal and product involvement.
The results show that the co-creation claim has positive effect on brand identification ($F=36.057$, $p=0.000$, $M_{\text{with}}=52.077$, $M_{\text{without}}=42.231$), which supported the hypothesis H1. In addition, the co-creation claim and self-construal have significant interaction effects on the brand identification ($F=16.466$, $p=0.000<0.01$). The simple main effect test illustrates that (see figure 1), in the condition of interdependent self-construal, compared to the no co-creation claim situation, consumers have higher brand identification when the co-creation claim exists ($M_{\text{with}}=61.308$, $M_{\text{without}}=44.808$, $F=66.472$, $p=0.000<0.01$). However, in the condition of independent self-construal, there is no significant difference of brand identification between the two different co-creation claim situation ($M_{\text{with}}=42.846$, $M_{\text{without}}=39.654$, $F=1.642$, $p=0.203>0.05$), indicating that, the hypothesis H2 is supported. Nevertheless, there is no significant interaction effects among the three variables: co-creation claim, self-construal and product involvement ($F=0.794$, $p=0.374>0.05$). Thus, the hypothesis H3 is not held.

5. DISCUSSION AND CONCLUSION

5.1 Discussion

In this study, all data were processed by SPSS. Our result indicated that co-creation claim has a positive effect on brand identification and the effect is moderated by the self-construal. These results supported the hypotheses H1 and H2. The interaction effects of co-creation claim, product involvement and self-construal on brand identification did not show significant difference, thus H3 was not supported by the data.

The results showed that product involvement does not have any impact on the effect of co-creation claim ($F=1.215$, $p=0.272$), which directly leads to no interaction effects between the three variables: co-creation claim, product involvement and self-construal. On one hand, consumers regard co-creation as a novel marketing behavior in the current market environment. Even in low-involvement situation, co-creation signal still can get their attention and thinking. On the other hand, low involvement products are relatively simple and there are not
significant differences between the brands. Such as mineral water, consumers often have more hedonic attribute expectation\cite{29}, and are more sensitive to the “brand warmth”\cite{30}. While co-creation claim is able to stimulate the “warmth” perception\cite{30}, as a result, co-creation claim in low involvement situation still has great influence power. Besides, no interaction effect was observed is perhaps associated with the design of the experiment. People tested were required to watch some pictures of co-creation phenomenon and virtual news; thus, they might transfer attention to co-creation signal in a certain extent even in low-involvement situation. In contrast, if subjects were given real products, the results might have supported H3.

5.2 Implications for marketing

Co-creation claim can influence brand identification positively. This conclusion shows that co-creation signal can affect customers’ brand association and narrow the psychological distance between potential consumers and brand. Accordingly, enterprises make co-creation signal as a kind of marketing strategy to attract target customers and maintain the relationship between consumer and brand. For example, in the description of product packing and advertisement, brand recognition elements including brand name, logo, font, color, and packaging should be mentioned that those are designed by the consumer. More importantly, the detailed description of the designer image consistent with the image of target customers can help enterprises approach target market.

Self-construal moderates the effect of co-creation claim on brand identification. Consumers of interdependent self construal, compared to consumers of independent self construal, have stronger feeling of brand identity influenced by co-creation claim. To individual with independent self-construal, there is no significant difference in brand identification. It is not hard to see different characteristics of consumers resulted in cognitive differences of co-creation claim. Therefore, enterprises should take different characteristics of consumers into consideration for improving the effectiveness of co-creation claim to adopt brand co-creation strategy. Fortunately, self construal can be triggered by scenario\cite{33}. Self-construal can be controlled and changed with different stimulus. It is important for enterprises to promote the formation of interdependent self-construal by exploring various marketing communication approaches. To be more precise, advertisement can influence individuals’ thinking modes and personality traits. For example, “Go home for celebrating the Spring Festival”, as one of Coca-Cola’s advertisement, activating the interdependent self construal\cite{34}. Enterprises can activate consumers’ interdependent self-construal to bring a better market impact affected by co-creation claim.

5.3 Limitations of the study and suggestions for future research

5.3.1 Limitations

This study explores the effect of co-creation claim on brand identification and draws some valuable conclusions. However, there are still some limitations.

One limitation may be arisen from the fact that the sampled consumers were chosen from college students for the sake of convenience and efficiency of data. Thus, some results may apply only to similar groups and cannot be used in other market segments.

Another limitations regarding mobile phone and mineral water as the high-involvement and low-involvement product respectively; parts of results may not be available to other product categories.

Further, researchers controlled the situation of co-creation claim with images and virtual news; to some extent, attention to co-creation claim in low-involvement situation might be raised, eventually influence the validity of research.

5.3.2 Suggestions for future research

Firstly, future research on one hand should expand the sampling range to other consumer groups instead of just selecting college students. On the other hand, future research should consider other product categories on
behalf of the high and low involvement products respectively for testing the hypotheses proposed in this study.

Secondly, as mentioned above, brand images and brand promotion activities can be co-created besides brand recognition elements both existing in product level and service level. Future research may verify the results of this study in brand images co-creation or brand promotion activities co-creation.

Third, future research can use the real product for controlling variables. When subjects are placed in a real consumption scenario, the experimental results will be more effective and reliable.

Fourth, future research should explore how market reacts to co-creation signal as more enterprises start to create brands with consumers collectively. With increasing number of enterprises implementing co-creation strategy, the effect of co-creation claim may disappear because of the decreasing interest and attention of consumers.

Fifth, longitudinal study can be applied in future research which can examine the long-term effect of co-creation claim. This study demonstrates that the consumer can produce an initial response to co-creation brand; while this kind of response will be influenced by subsequent behaviours of the brand with the passage of time.

ACKNOWLEDGEMENT

This research was supported by the National Natural Science Foundation of China under Grant 12BGL055.

REFERENCES


