The Role of Prior Attitude and Persuasion Knowledge in Mobile Application Contents for Public Interest

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Abstract

This study explores the effect of consumers' prior smoking attitudes and persuasion knowledge in the effect process of corporate social responsibility communication. Preceded by a pilot study, a survey of consumers' perception is conducted toward a mobile CSR application. First, consumers' prior smoking attitudes and persuasion knowledge are revealed to have interaction effect on reputation of the tobacco company. Second, interactivity of the branded content and consumers' persuasion knowledge have interaction effect on the perceived authenticity of the company. Toward reputation, interactivity of the branded content and consumers' persuasion knowledge have no significant interaction effect, but the level (high/low) of branded content has a direct effect on reputation. Practical implications, limitations and future study directions are discussed.

Keywords: *Mobile application contents, interactivity, persuasion knowledge, corporate social responsibility (CSR) communication*

1. Introduction

These days, some major tobacco companies have conducted non-smoking campaigns for teenagers in various ways. Among notable examples of corporate social responsibility(CSR) campaigns for adolescent anti-smoking, mostly the appeared are on websites of such major tobacco company as Philip Morris, British American Tobacco, Reynolds Tobacco, and so on. The CSR campaigns on the homepages of British American Tobacco and Reynolds Tobacco, show typical features.

In parallel with such movements, there have been numerous academic studies about the CSR campaigns and communications (Pracejus & Olson, 2004)[19]. Despite the efforts, relevant conclusion has not been established about the CSR effects and process rules, due to the influence of the consumer's suspicions on why the companies have done CSR campaigns (Ellen, Webb, & Mohr, 2006)[6]. Besides, earlier studies were mainly on unilinear influential relationship, so few studies were found on public contents which essentially have been regarded to contain interactive properties of participation.

In this study, we expected that the consumers would change their attitude to the smoking by the non-smoking campaign using the branded contents like a mobile app., which could give the pleasure and interesting to the users. In this respect, we tried to find out what is the role of the users' comprehension about the intention of the campaigns. For this purpose, we focused on the tobacco company and revolved around the consumer's perception about the tobacco companies and the mobile apps supported by the companies.

Based on earlier studies regarding the effects of communication contents, it is suggested smoking cessation mobile campaign could exert some influence on positive

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attitude and behavior changes through entertainment and participation. In this respect, this study asks if the consumers' perception of the intention of corporate can exert some significant influence on their attitudinal aspects. This study also aims to see how the persuasion knowledge, as the personal variable of a consumer, exerts an influence on persuasive communication (Becker-Olsen, Cudmore, & Hill, 2004)[2]. In parallel with this, the present study aims to find out the relationship between the perceived authenticity and perceived corporate reputation on which the tobacco companies' CSR campaigns using the branded contents have influenced. For this purpose, this study investigates the effects of mobile apps. For non-smoking, focused on consumers' perception of the intent of tobacco companies as the sponsor of smoking-cessation campaigns.

2. Theoretical Background

2.1. Antismoking Communication and CSR

It is generally said that tobacco companies are placed in a position where they have no choice but to manage the public relations persistently(Sohn, *et al.*, 2012)[21]. Two important frameworks can be suggested to exist in the management of the public relations of a tobacco company. One is an activity of public relationship management for overcoming the negative images which the tobacco company is given by birth. The other is an activity of necessity, so called corporate social responsibility (CSR), that is, the company is forced to manage the public relations in respect of returning the profit from tobacco products.

The communication activities in CSR perspectives are conducted to improve the possible negative image of the corporate and to enhance the positive images in general. CSR are inherently an activity of pursuing company's own interest as well as the public interest. It is thus important the CSR activities should be pursued in accordance with the personality of corporate for better communication effects (Becker-Olsen, Cudmore, & Hill, 2005)[3].

2.2. Interactivity as Content Attribute of Mobile Apps.

There has been tendency of producing convergent contents in public service fields, not only including traditional contents but also expanding non private contents such as educations, health programs, and automobile territories.

Also, public service communications have been increasing with contents such as a serious game to raise the companies' profile and manage the relationship with public.

The serious games are a designed system using factors of the game for intended effects. The intended effects are to remind the health, educations, and social tasks, to change the consumers' behavior, to perform, or to motivate their work effectively (Falkow, 2010).

A branded content is to connect advertising scholasticism with entertainment for marketing communications (Horrigan, 2009)[13]. It is one of the branding strategies and is used and distributed for entertainment, but also it is reflecting the merits and characteristics of marketing brand. These days, branded contents are used for health programs and public campaigns (Moyer Gusé, 2011) [17].

Specially, contents are getting beyond the genre and merging into new fields with no clear line of demarcation, with drastic change of high technology. After all, the branded contents territory is extending to the fusion contents fields that include infor-tainments (combination with information and entertainment), Mashnima (as a movie arts combined by techno, movies, and animations.) and etc.(Cohen, 2013) between arts and contents [4].

Interactivity is one of the core properties of the branded contents. Communicational interactivity for the participant in the communication means the level of the role with the interactional dialogue to exchange (Williams, Rice & Rogers, 1988), or the level to modify and the level of styles through the mediated circumstances. So interactivity has

been reported a major factor to help the process in using contents like advertising (Ha & James, 1998; Horrigan, 2009) [11].

2.3. CSR Message Processing and Persuasion Knowledge of the Receiver

Persuasion knowledge is regarding as how the consumers respond to persuasive message. Also, it is related with the theory that the consumer believes and is treated with the tactics, strategic message, persuasion attempts that marketers give them (Campbell and Kirmani, 2000)[5].

If persuasion knowledge is activated, consumers become to doubt the marketer's inherent motivation. For example, they become skeptical and doubt the intention whether it is manipulated. Under such situations, the consumers do not try to listen to the persuasion words, so they would have less favorable brand attitude and companies images (Jain and Posavac, 2004)[15].

Based on the precedent studies, this study defined the persuasion knowledge as the artificiality, manipulation, and a commercial intention of the CSR message. The construct items of persuasion knowledge is proposed as identifying persuasion intention (Kirmani, & Zhu, 2007) [16].

2.4. Independent Variables: Authenticity / Dependent Variables: Company Reputation

Perceived company authenticity could influence on consumer's experiences (Beverland & Farrelly 2010; Rose & Wood 2005)[3,16]. Authenticity has been also reported to be a main factor for successful campaigns. (O'Connor, Shumate, & Meister, 2008)[18]. So, in such studies, it is assumed that CSR campaign using branded contents could make consumers perceive the sincerity or the authenticity of a company. Lastly, it could influence on a company's perceived reputation.

2.5. Dependent Variable: Personal Smoking Intention

The degree of personal intention is related with trying to performing something (Ajzen, 1991)[1]. Specially, smoking intention means the frequency and amount of the smoking in the future, judging from the past smoking habits.

In fact, it is difficult to predict one's smoking intentions after his watching the TV-Ad. for informing non smoking effects. So this study lays down a operational definition about smoking intention such as "the frequency and amount of the smoking to intend henceforth". And, for measuring smoking intention, this study makes some questions based on advanced researches (Huchting, et al., 2008)[14].

2.6. Research Question

Research Question 1: Does the persuasion knowledge exert an interaction effect with the interactive properties of mobile application on the intention of non-smoking?

Research Question 2: Does the persuasion knowledge exert an interaction effect with consumers' prior attitude toward smoking on the reputation of the tobacco companies?

3. Method

3.1. Pilot Test

A pretest was conducted to explore the effects of application properties. Two apps were selected; one is the helper app for stopping smoking, the other is the name of "returning for non-smoker". Especially the apps are not supposed to be famous ones,

while containing some public interests. 40 college students' perception regarding the apps was investigated.

Respondents were introduced the name of 'British Tobacco Company', randomly selected as a sponsor of the public contents by researchers. Then respondents were asked if the mobile contents contained public messages related with actual CSR activities. To check the degree of public interest, Sethi (1978)'s two items were used: 'this app is public interest-oriented', 'this app contains social responsibility'. The result indicates that subjects in general perceive the app as public interest oriented, with mean value 2.78(standard deviation=0.632). Meanwhile, prior test to check corporate awareness yielded mean value 1.67(standard deviation=.794), seemingly much less than average, which implied little possibility of confounding effect by preoccupied corporate images and awareness. After all, the results of the pretest revealed the selected apps were proved to contain suitable public messages and were identified as being properly selected.

3.2. Main Survey Samples and Procedure

Main survey was conducted toward 181 college students (male 85 persons, female 96 persons). 59(32.6%) were smokers; 122(67.4%) were non-smokers. Before the survey, subjects were heard about the branded contents' definition and the cases. Subjects were also heard the survey's contents would be used as the tobacco companies' PR contents with the aim of securing subjects' involvement.

3.3 Measures and Measurement Instrument in Interactivity

Gao, Rau, & Salvendy (2009)'s 6 factors were used to measure the interactive properties of the mobile apps for antismoking. Specific items are : "I think this company which made this apps want to hear my opinion." "When I ask for some information about the apps to the company, I think the company immediately will give me some information." "I feel as if I share conversation with people through this mobile application." "This application enables me to get response as if I talk with people actually." Items are measured by 4 point Likert-type scales. The Cronbach's alpha value was 0.930.

Prior Attitude Toward Smoking

Prior attitude toward smoking was measured by 3 questions: "I am favorable of smoking." "I think positively on smoking" "I like smoking." The Cronbach's alpha reliability of the questions was 0.892.

Persuasion Knowledge

Persuasion knowledge was measured by 4 items according to Kirmani & Zhu (2007). Those are as follows: "I think this application sponsored by the tobacco company is artificial." "I think this app is manipulated by the tobacco company." "I doubt the genuine intention of the tobacco company which sponsors this mobile app for non-smoking." "I don't believe the authenticity of the application contents because the contents was sponsored by the tobacco company." The questions are measured by 4 point Likert-type scales. Also the measured mean values were divided into high and low values, based on mean value 2.54(standard deviation=0.632).

Company Authenticity

Company authenticity was measured by 3 items according to Thye, Lawler, & Yoon (2011). The items are : 'The CSR of this company matches with the value and trust of company." "I think this company's CSR is true." "The symbol of this company CSR stands for what the company has believed."

Corporation Reputation

Corporate reputation was measured by 6 items modified from the Fombrun, *et al.*, (2000). The items are as follows: 'This company is serving the best product and service.' 'This company is not reluctant to serve innovated products and service.' 'This company has high potential power.' 'This company is active in CSR activities.' 'This company has great interest in the environment and actually participates in saving the environment.'

4. Results

Validity and Reliability of the Items

Factorial analysis was conducted to see the validity of independent variables with VARIMAX rotating method KMO(Kaiser-Mayer-Olkin) and Bartletttest. For factorial eigen-value 1.0 standard was used, applied higher than 0.5 for factorial weight acceptance standard (Hair, et al., 2006).[8] In result of factorial analysis, five factors are extracted explaining 71.59% of total variance. Five factors are interactivity, prior attitude toward smoking, persuasion knowledge, corporate authenticity, and corporate reputation.

4.1. The Influence of the Interactivity of Mobile Content and Consumers' Persuasion on the Corporation Reputation (Research Question 1)

The results revealed no significant interaction effect between the degree of the interactivity and persuasion knowledge of the responders in the apps (F=.176, p=.676). But the main effects by the t-test of the deviation between high interactivity group(2.75) and lower interactivity group(2.28) are revealed to be significant(t=-4.56, p<.001).

Meanwhile, in the results by the 2-way ANOVA to see how the interactive attributions of the contents(mobile apps) and persuasion knowledge impact on the company authenticity, the interactivity and persuasion knowledge of the responders in the app contents influence significantly on the perceived authenticity(F=4.481, p=.037).
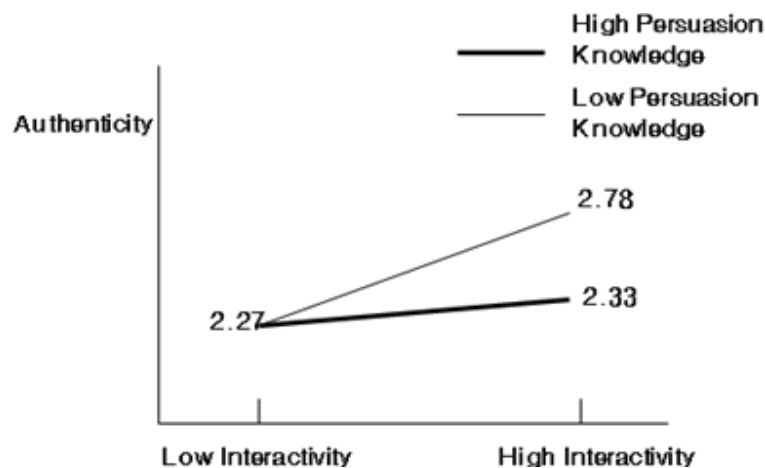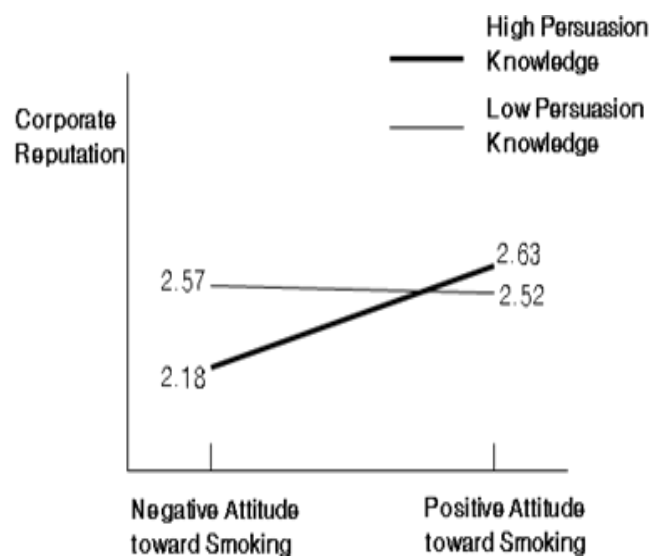

Figure 1. Interaction Effect between Interactivity of Contents and Persuasion Knowledge on Corporate Authenticity

As shown in Figure 1, in case of low interactivity, no significant difference was found in corporate authenticity according to persuasion knowledge. However, in case of high interactivity, perception of corporate authenticity in low persuasion knowledge was higher than that in high persuasion knowledge. The result implies that the impact of public contents with high interactivity can be different according to the consumer's inner

properties such as persuasion knowledge. Moreover, when consumers have high level of persuasion knowledge, the effect of the interactivity of contents possibly cannot be significantly strong, as compared those with low level of persuasion knowledge.

4.2. The Influence of the Pre-Smoking Attitude and Persuasion Knowledge on the on the Corporation Reputation (Research Question 2)

The degree of the pre non-smoking attitudes and persuasion knowledge had a significant impact on the corporation reputation by CSR(F=5.107, p=.026). Specifically, as for respondents who had negative prior attitude toward smoking, those low in persuasion knowledge showed higher corporate reputation points(2.57) than those high in persuasion knowledge did(2.18). On the other hand, as for respondents who had positive prior attitude toward smoking, those high in persuasion knowledge showed higher corporate reputation points(2.63) than those low in persuasion knowledge(2.52).

Figure 2. Interaction Effect between Prior Attitude toward Smoking and Persuasion Knowledge on Corporate Reputation

As shown in Figure 2, in case of respondents with negative prior attitude toward smoking, respondents with low persuasion knowledge showed higher mean value for corporate reputation than those with high persuasion knowledge. On the other hand, in case of respondents with relatively positive prior attitude toward smoking, respondents with high persuasion knowledge showed higher mean value for corporate reputation than those with low persuasion knowledge. Thus, an interaction effect was proved between prior attitude toward smoking and persuasion knowledge. In perspective of regulatory focus, it can be safely argued that consumers with negative attitude toward smoking become to feel negative toward smoking strongly, which in turn induces prevention focus. As a result, the influence of persuasion knowledge is increased, helping consumers with low persuasion knowledge accept public messages of the CSR contents. But, with the increase of influence of persuasion knowledge, consumers with high persuasion knowledge become to consider the public messages of CSR contents as all the more negative.

5. Concluding Remarks

The results of this study showed the consumer's smoking attitude had significant impact on the tobacco company's reputation in interaction with persuasion knowledge. First, consumers with a positive prior smoking attitude possibly show more favorable in the judgment of corporate reputation than those with a negative prior smoking attitude. In the process of the communication effect, prior attitude had an interaction effect with consumers' persuasion knowledge. Consumers with negative prior attitude appreciated the corporate reputation favorably when their persuasion knowledge was in low condition. On the contrary, consumers with positive attitude showed more favorable in the judgment of corporate reputation when the persuasion knowledge was in high condition. The result implies that consumers judge the effects of the CSR communication activities and try to enjoy public contents on the basis of their prior attitudes towards smoking behavior.

Second, it is found that the interactivity of the contents and persuasion knowledge showed no significant interaction effect on corporate reputation. However, on the perceived authenticity of the company, the two variables did show statistically significant interaction effects. Especially, as the degree of the interactivity is higher, the authenticity of the company is perceived greater. This means a company needs to utilize CSR contents with a high degree of perceived interactivity for a better result in corporate reputation. Moreover, when the contents have a high degree of interactivity, the contents can yield greater effects on corporate authenticity when applied to the consumers with low persuasion knowledge.

This study has some meaningful implication for understanding and unfolding CSR campaigns especially sponsored by such a negatively- biased corporate as the tobacco producing company. However, the study has limitations in that the survey was conducted with previously implemented contents. In this sense, the results should be understood with careful considerations. The relative small amount of samples also could be pointed out. And, this study could not cover the various properties of mobile contents such as convenience or ease of use, empathy, entertainment, accessibility, perceived intrusion. In this sense, a structural equation model(SEM) can be suggested to be deployed in order to demonstrate the relationship of various influential factors in mobile applications, different from general ones in advertising devices.

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