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Journal of Robotics, Networking and Artificial Life
Vol. 10(3); December (2023), pp. 226–230
ISSN (Online): 2352-6386; ISSN (Print): 2405-9021
https://alife-robotics.org/jrnal.html

Research Article

Towards a New Approach to Increasing the Persuasion of Product Marketing: An Experimental Study

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ARTICLE INFO

Article History

Received 25 November 2022
Accepted 15 May 2024

Keywords

Persuasive technology
Affective computing
Human computer interaction
Interaction design

ABSTRACT

Modern marketing strategies that leverage technology to of-fer significant value for the client have replaced conventional selling techniques in recent years. A conversational agent or dialogue system presents an interactive computing product as a means of influencing people's opinions. However, this expanding topic still had limits in the earlier study. To advance this field, the current experimental study incorporates new elements that are re-quired to enhance the ability to persuade and build a compelling case for product advertising. Research in the past has shown that emotional branding is essential to strengthen the customer's engagement. Therefore, in this study, we created six contents, conducted an experiment with Japanese participants, and analyzed how to persuade them with emotional and cultural content using a sinking boat joke. A sinking boat joke is a joke about convincing people to jump into the water when a boat is ready to sink, which incorporates a cultural context. The experiment was conducted by recruiting Japanese students at a Japanese university. Contents were presented in a counterbalanced way. The goal is to ascertain which emotion works best for advertising, to investigate cultural differences, and to analyze the content effectiveness that successfully persuades the Japanese participants.

1. Introduction

In the prior study, the customer's purchase decision is influenced by the emotional contents [1]. Both conventional and modern marketing strategies objects one of the same things: to influence their target audiences. However, the first essential question is, what is the influence of emotional content on persuading customers? Despite its mixed results of which the positive and negative contents are successfully influence people's perspective, understanding the core determent factor will help marketers to better target their audiences. In persuasive technology, modern marketing can utilize a conversational agent or dialogue system that represents interactive computing product advertising. It can be represented in virtual avatars, robots, embedded character in the computers or robots, or even as simple as animated content with human-like characteristics that shows facial expressions, emotions, and cultural context. Commercial producers have the know-how to persuade people to buy their products. However, this know-how is often not explicitly known. In this study, we analyze how people are persuaded by videos. We previously investigated the camera angles and emotions of virtual agents when they try to persuade people in a 3D space. The results showed that people's likelihood of being persuaded differed depending on their emotions and camera angles, depending on their personalities [2].

In this study, we analyze through experiments using videos whether the effectiveness of persuasion differs depending on emotion and cultural background. In recent years, commercials, including videos on YouTube, have had many different appearances. We will use videos that are inspired by YouTube videos and will also examine whether there are differences in emotion and whether persuasion differs depending on the culture of the viewer. We would like to verify that a particular culture is said to be useful for a particular per-suasion. In this paper, we use subjects to try to persuade through video and examine whether this is related to emotion and culture. In particular, we will analyze whether Japanese subjects are more likely to agree

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with a group that is said to be easily persuaded by Japanese people.

This paper is structured as follows: First, the background is defined. Section 2 examines the linked studies. The experiment's specifics are reported in Section 3. Section 4 summarizes the findings of the investigation, and Section 5 evaluates the theoretical contributions, limitations, and implications for future research. Section 6 brings the entire paper to a conclusion.

2. Related Works

According to [3], people or "subjects" will respond to any computer program in accordance with generally accepted social norms, which has significant ramifications for persuasive technology and persuasion. A smart system can provide a number of social cues that elicit social reactions from human users in order to promote certain products in the contemporary environment. An interactive agent is one example of how technology can be used to persuade people.

Persuasive interactive agents have been discovered to be influential in a variety of industries, including healthcare, coaching, marketing, and so on. A higher skill in social communication with the user was found to be closely correlated with the persuasive effectiveness of the agent [4]. A trusting collaborative relationship between the agent and the user was found to be the foundational brick in persuasiveness even more than the appropriateness of the decision-making.

Emotions are prevalent in marketing [5]. Consumption experiences and product usage can elicit emotional responses in customers both during and after consumption, influencing purchase decisions and post-buy behaviors [6]. Customers' emotional responses to store surroundings [7], e-store designs [8], and commercials [9] have been shown to influence their subsequent purchase decisions. Therefore, the experiment in this study was designed to determine which emotional content was closely associated to customer purchasing decisions. A sinking boat joke is a joke about convincing people to jump into the water when a boat is ready to sink. It incorporates a cultural context. Therefore, it is a culturally relevant joke about persuading people that connect to their national characteristics, culture, backgrounds, or typical country's stereotype. Ambiguity is frequently viewed as something to be avoided or eradicated in consumer or marketing related research. This joke demonstrates that one of ambiguity's most distinctive manifestations, humor, can be found everywhere [10]. Understanding the cultural context and how convincing the created contents are will thus be advantageous when employing this strategy. The joke examples are as follows:
– To the American, "If you jump, you'll be a hero!" (cue superman pose, and big splash)
– To the Russian, "All the vodka was washed overboard, I can see the bottles floating past. . . if you're quick you can grab it." (glug glug glug)
– To the Italian, "See that beautiful woman with the luxuriant underarm hair swimming past? You can really make a splash and impress her."
– To the French, "Please do NOT jump into the water." Yep. Nice reverse psychology.
– To the English, "At a time like this, a true gentleman would jump."
– To the German, "According to the regulations, all the men must jump into the sea."
– To the South African, "Before the braai we're going for a swim." Braai = ultimate barbeque.
– To the Australian, "Don't be a wuss, all your mates are down there in the drink."
– To the New Zealander, "Strap on this bungee cord- she'll be right!"
– To the Chinese, "Check out that juicy, delicious-looking fish over there. And the yummy fins on that shark."
– To the Japanese, "Everyone else has already jumped." – To the South Korean, "The Japanese guy has already jumped."
– To the North Korean, "This is your chance to defect!" – To the guy from Kansai, "The Hanshin Tigers won!!!"

3. Experiment

The emotional contents were represented in six video that aim to persuade the Japanese participants to purchase a health supplement with animated emotional facial expressions and narratives. A cloud-based animated video creation tool called Vyond with AI-generated expressive face expressions and AI-text-to-speech narration, was used to create these contents. The videos introduced the six primary emotions according to [11], which were anger, happy, fear, sad, surprise, and disgust. In the cultural part, the narratives from the animation were trying to approach the viewers related to the Japanese culture's sinking boat joke method, which was, "Everyone else has already jumped." In our case, we try to approach the participants by mentioning that everyone is already consumed the supplements, is convinced by the effects, and so on. Moreover, we try to design the character that similar to what is usually seen or normal in Japan, as well as using female voice like other usual marketing content in Japan.

We published each content along with 15-seconds neutral video and some questions in each Google Form. Thus, there are six forms spreads in a random order to the students. A counterbalanced presentation of the content was used. The experiment was carried out by recruiting a total of 17 Japanese students from the Japanese university. All of these students watched the content Google Forms. The study aims to research cultural differences, identify the emotion that best persuades Japanese participants, and analyze the effectiveness of the content.

4. Results and Discussions

The demographics of the participants in the study on health supplements among all Japanese students are shown in Table 1. Only a few of them are interested in using health supplements, and the majority of them have never tried any before. It is interesting to note that participants come from a variety of faiths, where there were people who do not seem to have a fixed religion, despite their country of origin

and ethnicity being homogeneous. Fig. 1 shows the six emotions.

Table 1. Participant's Demography

Participants	Answers
Number of participants	17 people
Age	18-24 years old
Country	Japan (100%)
Ethnicity	Asian (100%)
Religion	No religion (66.7%), Buddhist (22.2%), Shinto (5.6%), Others (5.6%)
Tried health supplements before	Yes (27.8%), No (72.2%)
Interested in health supplements	11.1%

Fig. 1 Overview of Six Emotional Content

Fig. 2 Emotional Content of Anger

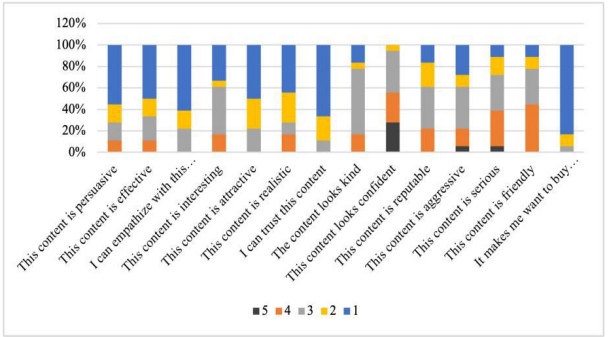

Fig. 3 Analysis of Anger Emotion

Fig. 4 Emotional Content of Happiness

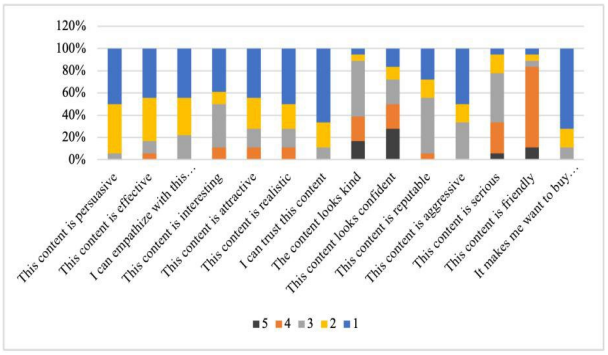

Fig. 5 Analysis of Happiness Emotion

Fig. 6 Emotional Content of Fear

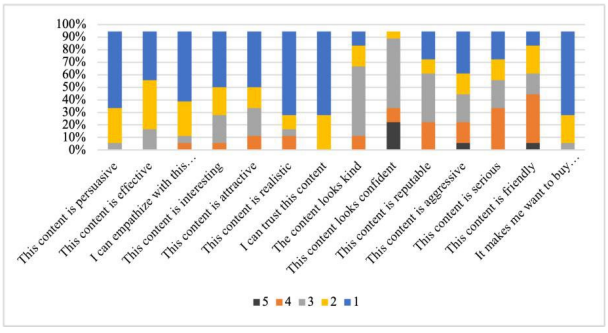

Fig. 7 Analysis of Fear Emotion

Fig. 8 Emotional Content of Sad

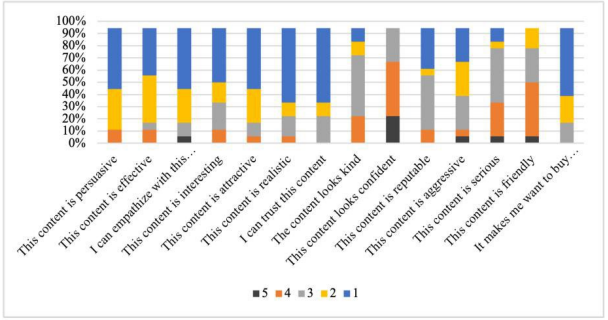

Fig. 9 Analysis of Sadness Emotion

Fig. 10 Emotional Content of Surprise

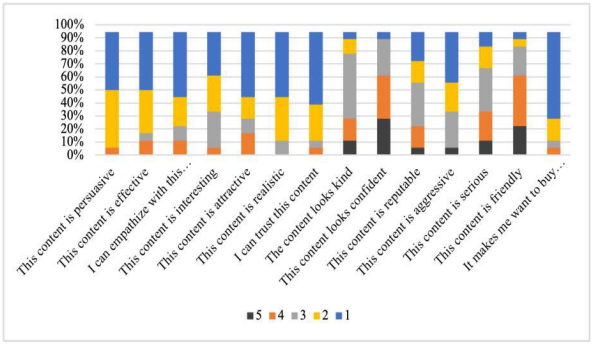

Fig. 11 Analysis of Surprise Emotion

Fig. 12 Emotional Content of Disgust

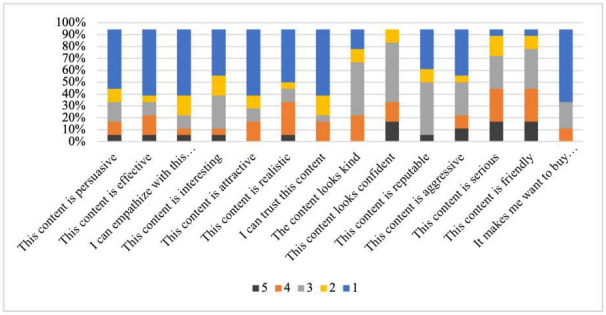

Fig. 13 Analysis of Disgust Emotion

In Fig. 2 and Fig. 3 about emotional content of anger, some viewers' doubts the reliability of the product being marketed, which was a health supplement. However, they were successfully influenced by the unpleasant feeling of anger in this clip. When they watched the video, they felt uneasy, negative, or angry. Additionally, they wished some graphs or data that could provide more information about the supplement. The only persuasive feature from participant responses in this angry emotion was that the content appears the most confident.

According to Fig. 4 and Fig. 5 about the emotional content of happy, some viewers raised their trust in the product as a result of the good mood, and some narratives stated that other individuals use the supplement. They are not motivated to buy the product, though, since they believe that too much positive emotion scares them. Furthermore, they are not lured to the emotion, which was pleased, after seeing the video since they are distrustful of the commercials in the first place.

The emotional content of fear in Fig. 6 and Fig. 7 resulted in viewers not feeling terrified of the emotion provided there, as well as not trusting the content. Some of them also believe that frightening the audience is too severe, and that they cannot be swayed as a result. This contradicts the majority of previous research evaluations on the fear emotion, which claimed that fear is the most effective emotion for influencing consumers in health-related marketing content.

Some participants in the sad emotional content video in Fig. 8 and Fig. 9 above were influenced by the negative emotion. They stated that if they have anxiety disorders, they will buy the supplement after seeing the advertisement. However, users who were not easily swayed by the sad sentiment stated that they could not think that unpleasant moods could be solved with merely medication, making them skeptical of the content.

In Fig. 10 and Fig. 11, some viewers were affected by the pleasant surprise feelings that they could feel some luck or good things were about to happen if they purchased the supplement, based on the emotional content of surprise discussed above. However, similar to previous comments about credibility, they longed for additional facts to persuade them, so they could trust the effects after taking it.

The results of Fig. 12 and Fig. 13 of disgust emotional content were interesting. Regarding the influenced by emotion element, some participants were disgusted, indicated that they could smell the terrible odor just by watching the video, felt sympathy for the character who was experiencing a poor experience, and, strangely, felt the opposite emotions, which were humorous and funny. Regarding the other features, they believed they could trust the content, that it was effective, credible, and reliable. They said the visuals, storytelling, and overall content were easy to understand. We can conclude from this that disgust is the emotion that performs well for this experiment.

Anger and disgust were the two main emotional variances across all six contents. In contrast to the disgust emotion, the participants in the anger emotion did not appear to show empathy or to be readily persuaded by the content. The participants were effectively persuaded, effective, intriguing, realistic, confident, reputable, assertive, serious, friendly, and empathetic by the disgust emotion.

From the animation, the emotions of anger, happiness, and surprise (positive surprise) show the most confident impression on the participants. The emotion of disgust shows the most realistic impression, while surprise (positive surprise) shows the friendliest one.

Overall, disgust was the only emotion from the six animated video contents that was most effective in persuading Japanese participants in the health-related narrative to purchase a supplement.

5. Conclusion

This study investigates the unique compliance criteria for a persuasive marketing content that can improve future research. However, the results should be under-stood in light of the limitations.

First, our experimental research was conducted primarily with homogeneous target participants (e.g., Japanese university students in a comparable age range). This study can be expanded to include more samples from non-homogeneous participants to generate more accurate data.

Second, deciding to use rigorous criteria yields limited outcomes. These findings could have been different if we had used broader inclusion criteria. Despite these constraints, we are optimistic that consequences will assist scholars in addressing these critical tasks. Future research should base persuasive content on a more comprehensive understanding of experience, according to our recommendations.

Adapting the narratives, animated facial expressions, and other possible elements to the selected subjects is also vital, as [2], [11], [12], [13] stated that the matching between the personalities of the subjects and the facial expressions of the agents increases the effectiveness of persuasion. This study proposes empirical recommendations for any marketing-related content using technology, emotional perspective, and cultural context. It focuses on a single, original idea in order to advance and convey perspectives on a certain research subject.

Disgust is the feeling in these six emotion-inducing videos that most effectively persuades the viewers. They were swayed and followed the stories' logic to the last detail. They occasionally described their feelings and possible smells after simply watching the content. In order to take good care of their health and avoid certain health issues as described in the video, they felt the need to change their action, which was to make a purchase of the supplement.

This research collects and statistically analyzes data from our experiment with Japanese students at the Japanese university. The study's findings, in conclusion, can be used to any dynamic emotional branding and persuasive technology-related trials. The cutting-edge information provided by this study is a critical first step toward a more unified involvement in content marketing.

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Authors Introduction

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