

A SYSTEMATIC REVIEW OF THE EFFECTS OF ANIMATION ADVERTISEMENTS ON CONSUMER PERCEPTION

Siriwipa Naosrison¹, Panida Nerathai², Prarawan Senachai^{3,*}

ABSTRACT

Producing advertising which suits the target audience and stands out from competitors is a critical challenge. Animation is a creative, innovative, profitable mode of entertainment that can make audiences happy, using effective advertising technologies. Although animation in advertising is widespread, little is known regarding the current empirical research on the topic, especially the advantages of this media mode in marketing. This study aims to fill this gap by improving understanding of the basic concepts related to animation and its impact in advertising. This review paper is based on the existing related literature. It identifies the concept of animation, elements of animation advertising, and its impact on customer behavior. A systematic search of SCOPUS databases using key search terms identified 133 unique articles, sixteen of which met the inclusion criteria. A narrative synthesis of the reviewed studies revealed internal and external factors related to customer awareness and intention behavior. This paper concludes that there is solid potential for designing animation advertising well-suited to the target audience worldwide.

Keywords: A systematic literature review, animation advertisement, cartoon advertisement, effectiveness of animation

1. INTRODUCTION

Marketing achievement is a required talent (Das, 2021). Thus, many companies aim to make advertisements which are attractive and stand out from others, ultimately attracting greater consumer attention than the competitors (Goel & Upadhyay, 2017; Turow, 1997) by producing entertaining advertising (Campbell & Marks, 2015; Dyer, 2008). Consumers tend to pay attention to funny advertising, while the most memorable advertising campaigns are usually

hilarious (Yim et al., 2012). Animation can be used to create advertising using still pictures and moving objects through technology (Goel & Upadhyay, 2017). Cartoons are replacing human celebrities in advertising (Goel & Upadhyay, 2017). Animation is a creative and innovative form of entertainment and an effective advertising technology; it is a profitable form of entertainment that can make audiences happy (Wasko, 2020). Animation is not only for children but is also popular among adults as it can freely express imagination and remind people of happy

¹Siriwipa Naosrison is now studying in the Department of Marketing at the Faculty of Business Administration and Accountancy at Khon Kaen University in Thailand

² Panida Nerathai is now studying in the Department of Marketing at the Faculty of Business Administration and Accountancy at Khon Kaen University in Thailand

^{3,*} Dr. Prarawan Senachai (corresponding author) is a lecturer in the Department of Marketing at the Faculty of Business Administration and Accountancy at Khon Kaen University in Thailand. She earned a Bachelor's and Master's of Communication Arts from Bangkok University in Thailand in 1997 and 2001. She obtained her doctoral degree in Marketing Communication from the Faculty of Arts and Design at the University of Canberra, Australia. Her research interests include Communications & Media, Customer Relationship Management, Service Marketing, and research related to the field of marketing. Email: parse@kku.ac.th

memories (Goel & Upadhyay, 2017), resulting in a positive attitude towards advertising (Rose et al., 2012).

The most popular attention-grabbing tool for Internet advertising is animation in social media campaigns, blogs, and other websites. This helps to increase brand awareness, grab consumers' attention (Bush et al., 1983), make advertising stand out, and drive higher levels of consumer engagement (Lu et al., 2016). In contrast, Kuisma et al. (2010) argued that animation had little or no effect on attention, but a positive effect on concentration in skyscraper advertisements, while consumers remembered only banners. Finally, these researchers concluded that animations both positively and negatively impact attention and advertising memory, particularly, excessive animation can construct a negative attitude toward advertising.

Although animation in advertising is widespread, little is known regarding the current empirical research on the topic. The effect of the animation advertising format on attention and memory appears almost unexplored (Ausman et al., 2004) in the Internet environment (Kuisma et al., 2010), and in terms of its advantage in advertising (Goel & Upadhyay, 2017). Accordingly, this study aims to address the impact of animation advertising on consumer awareness from the past to the present globally. By doing so, the research addresses the questions: *What elements in animation advertisements affect consumer awareness? and How do animation advertisements affect consumers?* A synthesis of the available evidence about the impact of animation advertising is required to draw attention from consumers in future advertising. Therefore, a systematic review will be conducted, incorporating a meta-analysis of studies examining the effects of animation advertising on consumer behavior.

2. METHODS

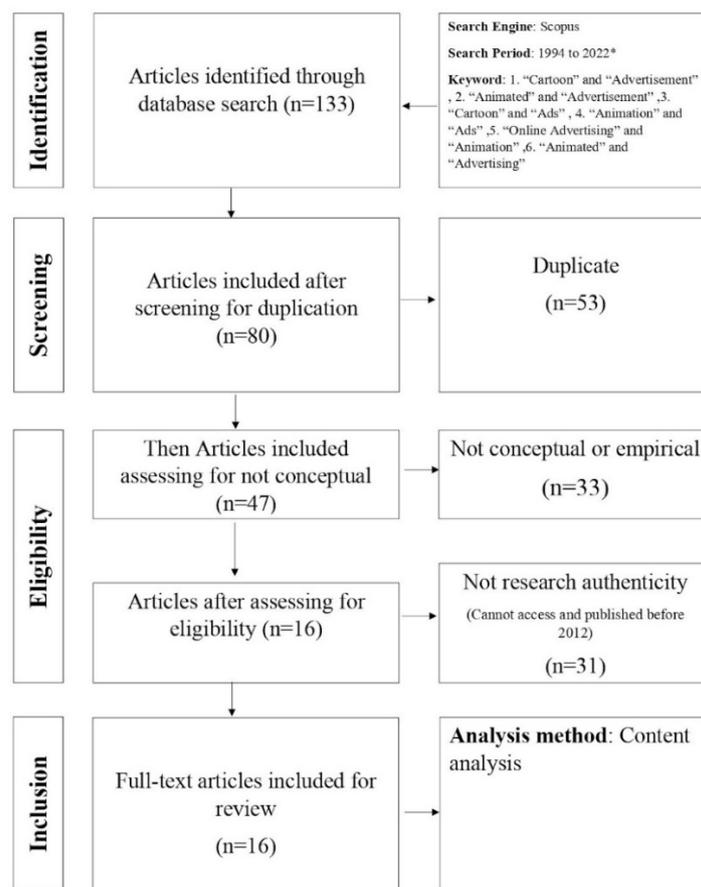
2.1 Data Sources And Search Strategy

Many researchers have used different methods to identify papers to consider in a

literature review (Ellis & Haugan, 1997). For a systematic review, it is vital that the methods of identifying papers are described and can be justified (Liyanagunawardena et al., 2013), including re-application by others (Fink, 2019). This research searched relevant articles through the SCOPUS database from 1994-2022. Documents were considered relevant if their primary focus was to explore the concept of animation in advertising and its impacts. The index of credibility and up-to-date research has been established from 2012 onward. Search terms for cartoon, animation, and advertising in the Business, Management, and Accounting categories were also defined. The process is described according to the PRISMA diagram of the conceptual framework shown in Figure 1.1.

2.2 Data Extraction

Following the PRISMA diagram above, the study results can be explained utilizing a systematic literature review through 4 processes as follows: First, identification by using SCOPUS as a search engine to search for relevant articles from 1994 to 2022. Six keyword phrases were used to search for exact and relevant papers; these were (1) cartoon and advertising, (2) animated and advertising, (3) cartoon and ads, (4) animation and ads, (5) online advertising and animation, (6) animated and advertising, due to the centrality of these concepts in the review. The advanced search option was checked to gain finer search results. In total, the first step returned 133 articles (i.e., 18 articles from the first keywords pair, 22 articles from the second keywords pair, 8 articles from the third keywords pair, 23 articles from the fourth keywords pair, 18 articles from the fifth keywords pair, and 44 articles from the sixth keywords pair). The research then progressed to the second stage or screening stage, involving downloading full-text articles from the database for the screening process. It was found that 53 papers were duplicates, while 80 articles met the initial screening criteria.



Note: * = up to July 23, 2022

Figure 1 Review procedure based on the PRISMA diagram. Note: * = up to July 23, 2022.

The third step involved two rounds of eligibility screening of the articles. In the first round, 33 articles were removed due to lack of relevance, either conceptual or empirical. In the second round, articles published before 2012 were removed. The data collection process resulted in the identification of 16 pieces for review in the final stage. The final stage used content analysis to review the 16 conceptual and empirical studies published from 2012 onward to synthesize a systematic review of the literature and conduct a comparative research study in the context of the influence of animation advertisements on consumer perception.

2.3 Quality Assessment

There is no established tool for assessing the quality of observational studies evaluating animation advertising effectiveness and its

impact. Modifications included the removal of nonapplicable characteristics or components of elements (e.g., sample size calculations). Point allocations for outcome measures were not altered. Bias assessments were conducted by one reviewer and independently checked by a second. Discrepancies were discussed until a consensus was reached.

3. RESULTS

3.1 Publication Trend

From the meta-analysis, there has been growth of animation advertising research from 1994 to 2017. There was a substantial increase in the number of studies in 2015 and 2017, with the highest total of 15 articles in both these years. From 2017 onward, the topic declined in popularity. It was found that

11 papers were published in the marketing field, followed by 4 in business and international management and 1 article in the field of tourism—published in journals related to advertising and business (See figure 2). The journals that published the highest number of articles were *Developments in Marketing Science: Proceedings of the Academy of Marketing Science (Q4)*, which published 17 pieces. Meanwhile, the *Journal of Advertising (Q1)* published 16 articles.

It was found that this research topic was primarily conducted in Asia, North America, and Europe, respectively. In Asia, research has focussed on the role of participation, the impact of animation, and advertising avoidance, in making advertising even more enjoyable. In North America, many studies focused on composition, advertising design, and various impulse factors in advertising media, while European studies explored designing advertisements that match consumer behavior, preferences, and boosting recognition. Therefore, the studies took different views to examine the effect of animation advertising. It is hereby suggested that a survey of inappropriate animation advertising toward brand attitude and recognition would be of great interest.

3.2 Factors Influencing the Effect of Animation Advertisement on Consumer Awareness And Behavior

From the meta-analysis, the elements in animation advertising that affect consumer awareness consist of effects, colors, designs, and animation characteristics. For instance, sound effects combine animation features (graphics, colors, and text) which can make an advertisement stand out and be more attractive. We found that animation size is the heart of making products or brands become known. The bigger the animation image, the more memorable. For print advertising, the image should be more than half of the advertising. North and Ficorilli (2017) found that the most clickable size is 300 x 250 pixels. They noted that large images have more clicks than small images because large images are more likely to be seen by consumers.

Color also plays a vital role in catching customer attention, including the shades, intensity, and value of the color. All these characteristics influence viewers' perceptions of advertising and brands. It was found that red, black, and brown are the color related to sadness (Bellizzi & Hite, 1992; Singh, 2006).

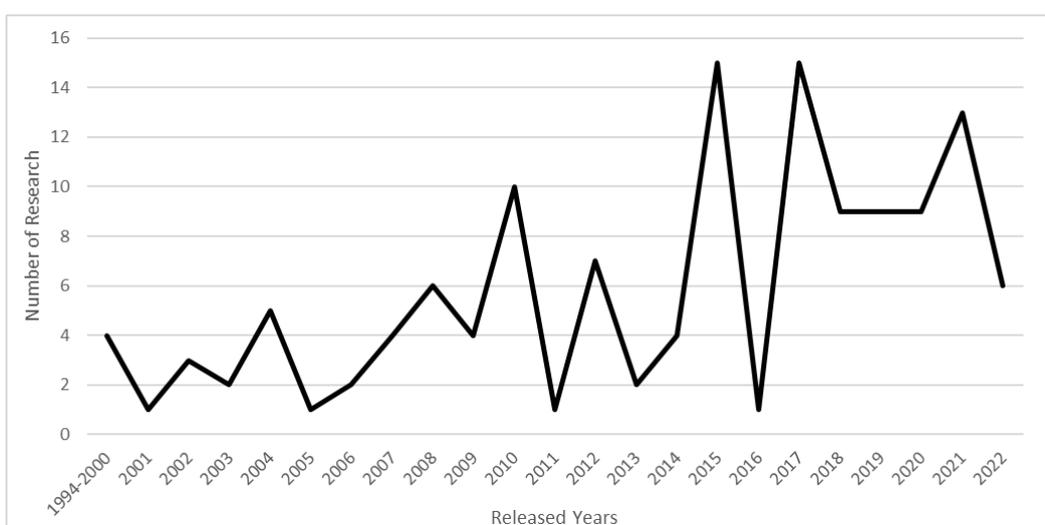


Figure 2 The number of articles published in 45 academic journals between 1994 and 2022.

Despite this, red achieves more clicks (Mattke et al., 2021). Conversely, blue stimulates purchases (Bellizzi & Hite, 1992). This reveals that red and blue are more attractive than other colors because they are primary colors, which stand out and are more apparent, making them the first color people will see (Ibraheem et al., 2012).

The appropriate design, layout, and content, depend on the type of advertising and the advertising purpose. Kashif et al. (2012) reported that cartoon characters significantly influence children's attention, making many brands produce cartoons to inform about brands where the target is children. Furthermore, the time and frequency of viewing affects consumers' perceptions. When the advertisement has a longer time it results in the audience remembering and absorbing more information from the advertisement. However, Lee and Ahn (2012) found that while a more extended advertisement fixing period results in better memory it also causes adverse effects on attitudes. Long advertising can cause the audience to feel bored, resulting in negative attitudes toward the advertisements. The frequency of advertising shows cannot cause perception and recognition directly. However, repeatedly watching the ad can leave an impression, causing changes in attitude without knowing it.

Based on the literature, many factors affect consumer awareness and buying decisions—culture, age, and interest in the brand. Culture is the basis of psychology, which is a general standard for awareness, evaluation, interaction, and performance (Hong & Choi, 2000). According to Segoo and Lee (2012), advertising in Eastern culture uses animation more than in Western culture. Furthermore, Eastern culture uses emotional attraction more than Western culture. Thus, cross-culture study is required to gain better insight into animation advertising and its impacts on designing advertising to suit the respective target audience so that advertising efficiency may be achieved.

Age range is another crucial factor affecting awareness due to knowledge and understanding of age-related content.

Children focus primarily on using images as images are more effective in attracting attention than text (Lee et al., 2019). Children pay more attention to cartoon characters or animated advertising than still images because of the limited readability of young children (Rose et al., 2012). Thus, cues that stimulate brand awareness are carried out using images or fantasy characters to evoke attention and recognition. Finally, consumer interests and attitudes toward brands also affect perceptions. If consumers have a positive attitude, they will be more open-minded. Gaur and Sweta (2021) revealed that negative attitudes cause consumers to speak negatively about brands. When consumers are forced to look at brands negatively, they are often frustrated at being forced to look at what they don't want. In comparison, if they have a positive attitude toward brands. It not only leads to clicks but can also improve brand image.

Based on the results, it can be claimed that cognitive understanding, feelings, constructed attitude, credibility, purchasing intentions, and memory, are improved in animation advertising. Similarly, Hsu et al. (2007) noted that ad animation could hugely influence consumers' attitudes toward brands and purchasing intentions. The animated advertising viewers are more willing to buy relevant products than before if they have a positive attitude. Other variables, such as personality type (Ruiz & Sicilia, 2004) and habitual traits, favor the utilization of the product, while animation speed (Sundar & Kalyanaraman, 2004), may also reflect consumer awareness and intentions. However, the key factors are cognition, comprehension, and emotion, which will lead to the consumer's memory of the brand and recognition.

3.3 Theories Used in Animation Advertising Research

Four categorical theoretical frameworks have been used in animation advertising research; cognitive, affective, contextual, and sensational, that can be summarized as follows;

3.3.1 Cognitive

a. Information Processing Theory (IP) or Data Processing Theory. When viewing advertising, it must be processed to understand the meaning received. Individuals' abilities to process data are limited and different. Data processing theory generally consists of attention, thoroughness, and behavior (Bargh, 2002). At first, people will pay attention to animation advertising to consider details before responding with behavior. Three research articles have applied IP to conduct their research.

b. Limited capacity theory describes the clicking of advertising in an application. When a person sees an advertisement in an application, the first process is the structural and semantic factors of the advertising (Lang, 2000). This processing will affect the individual's click behavior. However, it is found that a person cannot process the structural and semantic factors of advertising at the same time (Broadbent, 2013). Therefore, viewing advertising must be of interest first, while they may watch a few advertisements due to limited memory capacity. When interested, a viewer will go to the data processing process. However, only one research article applied this theory.

c. Social learning theory is a concept describing how humans learn from observing the actions and consequences of others. This theory supports the theory that the placement of various products and levels can change behavior, supporting the idea that behavioral changes may result from repeated exposure to behavior models (Avery & Ferraro, 2000), which means individuals can learn to imitate observable behavior. For advertising, social learning theory found that interactions between behavior, the environment, and cognitive events, influences perception and consumer behavior (Fullagar & Barling, 1983).

For advertising research, these three theories require knowledge, ideas, and observation, to understand the meaning and context the advertisement wants to convey, including predicting changes that will occur to a person's behavior. These theories explain

the processing of information, where a person must become interested before considering details and responding with behavior. Exposure to that experience repeatedly will cause behavior changes.

3.3.2 Affective

a. Parasocial relationships have been explored applying the principles of uncertainty reduction theory. Parasocial relationship development follows a path from social and task attraction to parasocial interaction to a sense of meaningful connection (Rubin & McHugh, 1987). However, its framework is often conflated conceptually and methodologically, leaving it unclear which concept is being tapped. Therefore it is necessary to choose a measurement with care, to avoid conceptual and empirical confusion (Dibble et al., 2016). A study about social media using this approach found that social media provides practical ideas to utilize parasocial interaction as a vehicle for brand building, public relations, and advertising to influence buying intentions (Rasmussen, 2018). One animation advertising research has used this theory.

b. Excitation transfer theory, which explains emotion reactivity in immediate social interactions (Zillmann, 2008), is related to time discrepancy (Bryant & Miron, 2003). Excitation transfer may be created by emotions from message exposure and affect emotions in social interactions (Zillmann, 2008). Therefore, stimulation may be transferred, causing subsequent responses or behavior to intensify (Bryant & Miron, 2003). For instance, when an unfamiliar brand is placed in a highly arousing positive scene, intentions to purchase the brand are greatest. Main effects were found for the valence of brand attitude and purchase intentions. As a result, not only valence but arousal of media should also be considered when placing unknown brands (Mitchell & Nelson, 2018). This concept is used in one research article.

c. The mere exposure effect has described that liking for a stimulus increases on repeated exposure to that stimulus (Montoya et al., 2017). Mere exposure to a

brand name or product package can encourage a consumer to have a more favorable attitude toward the brand, even when the consumer cannot recollect the initial exposure. This implies that repeated exposure to a stimulus through multiple channels can increase the attitude toward the product, resulting in motivation for buying (Meyers-Levy & Malaviya, 1999). Two articles use this theory.

These three theories address emotions and feelings. Using actors or characters in the medium affects customers' emotions and sensuality, which can be applied in animation advertising by creating the surface of the animation to arouse customer emotions and intentions to buy the products.

3.3.3 Context

a. The Stimulus-Organism-Response (SOR) consumer behavior model is used in various environmental aspects. The environment can act as a stimulus (S) influencing the internal state of the individual (O), which is subsequently met by individual behavior (R) (Zhai et al., 2020). Social stimuli can be the critical mass in social interactions. Meanwhile, media stimuli have content timeliness and media richness. Social and media stimuli significantly impact individual internal experiences (Hsiao & Tang, 2021). The SOR theory is used in one research article.

b. The Use and Gratification (UGT) theory explains media users are enthusiastic about choosing the media they consume. It focuses on media use and gratification from viewers' activities that meets their needs (Papacharissi & Rubin, 2000). UGT explores the reason for selecting various media options for the viewers (Potter, 2012). Individuals may view the same media and content but may have different motivations for viewing (Katz et al., 1973). Finally, UGT is used in two research articles.

c. Two-step qualitative comparative analysis (QCA) reflects the sequential processing of structural and semantic factors of limited capacity for explaining clicking behavior. It is found that irritation, private concerns, and personalization are the only

factors leading to clicking behavior on the processing of animated in-app advertising (Mattke et al., 2021). Two research studies adopted this framework to explore animation advertising.

These three theories are related to the context between consumers and consumer behavior. Focusing on customer needs could arouse them to perform the desired behavior.

3.3.4 Sensation

a. Motion Effect Theory claims that humans tend to focus on fast-moving objects and pay attention to a source of motion, resulting in processing relevant information (Sundar & Kalyanaraman, 2004). The visual orientation toward motion and the resulting physical reactions prepare customers to process relevant information (Diao & Sundar, 2004). Thus, animated advertising tends to be more effective than stationary advertising (Sundar & Kalyanaraman, 2004). One research study applied this theory.

From the meta-analysis, most studies used only one theory. Four studies used a combination of approaches, while no reference theory could be identified in the six remaining academic studies. Animation advertising research has various aspects to explore; it is suggested that more than one theory should be used to accomplish research goals. This expands the knowledge and contributions, helping to support the research assumptions to be more reasonable and intensified by the integrated approach (Hollebeek et al., 2019).

3.4 Methods Used in Animation Advertising Research

From the 16 articles, half the studies in animation advertising used a quantitative approach. Six studies conducted research using mixed methods while only two used qualitative approaches. At this point, it can be said that future research would benefit from mixed methods approaches. Studies utilizing both qualitative and quantitative methods are more rigorous, yielding more reliable results (Li et al., 2020). The major strength of using

both qualitative and quantitative approaches in the same study is that it provides both breadth and depth. As a result, employment of various techniques in future studies should be encouraged in order to improve the quality of the study's conclusions regarding the animation advertisement context and further improve studies.

4. DISCUSSION

The objective of this study was to synthesize a systematic review of the literature on the effects of animated advertising on consumers, and consequently to suggest academic gaps for future research studies. Questioning the elements of animation advertising that impact consumer perception, the synthesis of results showed that animations alone could not be effectively perceived by customers. It is also necessary to have other aspects supporting the completion of creative animation advertising, such as advertising effects, size, use of color, design, and animation style, all of which affect customers' perceptions, attitudes, sense of credibility, purchase intent, and memory. Animated advertising has a more significant impact than stationary advertising as consumers tend to focus on fast-moving objects and pay attention to sources of motion; this results in the processing of relevant information making consumers more aware of the brands (Sundar & Kalyanaraman, 2004). The more consumers see animated advertising, the more they remember as the animation is used in various ways to attract attention, such as in photos of cultural places or resting places (Li et al., 2020). Assael et al. (1967) noted that visual elements within image advertising should occupy more than half of the advertising, with 300 x 250 pixels generating the most clicks (North & Ficorilli, 2017). This includes sound effects, images, or text in larger sizes.

Regarding color, different colors tend to evoke different emotions. For instance, blue is more stimulating to buying behavior (Bellizzi & Hite, 1992; Singh, 2006), while red is more attractive resulting in higher clicking rates (North & Ficorilli, 2017); both are

primary colors that are distinctive and dominant, making them the first colors to be seen. This design aspect suggests that each type of ad serves a different purpose. Therefore, the advertisement's content, appropriateness, and details, should be considered when establishing the format. For example, advertisements targeting children, should have uncomplicated content which is easy to understand by using pictures rather than text. The character of the animation should be consistent with the brand because the more the character of the animation communicates with the brand, the greater consumer awareness of the brand will be. It will also positively affect the brand's long-term relationship with customers (Zhou et al., 2021). Advertising duration is also important, as the longer the advertisement duration, the more memorable the advertising will be to the audience.

However, Lee and Ahn (2012) found that while a longer ad duration had a better effect on memory, it also had a negative effect on attitude. This is because long periods increase perception and memory, but when too long, may cause the audience to feel bored and create a negative attitude towards the advertising, rather than generating awareness. Nevertheless, the result depends on each individual's cognition and age range. The purpose of the advertisement will vary as the age increases, while perception of viewers vary accordingly. For example, children tend to be interested in enjoyable advertisements related to animations because children's ability to interpret is limited, and they prefer simple and easy understanding. Lagomarsino and Suzanne Suggs (2018) found that the images that children liked the most were cartoon animations more than photographs and drawings. Likewise, Li et al. (2020) found that animated cartoon images increased children's interest effectively. Thus, it is suggested that advertisements for children's products use animation to catch their attention and motivate them to watch the advertising longer. Finally, Bush et al. (1983) noted that advertisers should use animation as a method of execution in their TV advertisements

directed at adults as well as children.

Culture can be seen to affect advertising production and consumer perception. Sego and Lee (2012) found that banner advertising from Eastern cultures used more emotional appeal than banner advertising from Western cultures as people in Eastern cultures are more emotionally sensitive (Kashima et al., 2004), resulting in Eastern cultures using animation more frequently (Sego & Lee, 2012). Therefore, advertisements such as media campaigns, blogs, and websites, broadcast in eastern cultures, should be primarily emotional to construct consumer interest and attitude toward the brand. If consumers like or understand the advertising, it will receive better responses and interest. Gaur and Sweta (2021) reveal that negative attitudes cause consumers to speak negatively about brands. When consumers are forced to view a brand, they have a negative attitude toward a website banner and are often frustrated that they are being forced to view something they do not want. In contrast, if they like the image, they will be more willing and open-minded in their viewing, resulting in faster acceptance, and leading to clicks on the advertising or improvement in the brand image.

In summary, animation allows both adults and children to express their imagination and be reminded of happy moments (Rose et al., 2012). The influence of animated advertising on customer awareness and perception depends on individual factors as well as the advertising elements. Thus, media creators should understand customers' cognitive, affective, and behavioral aspects, in order to design animation advertising that suits them. By doing so, the awareness and recognition of brands may be better accomplished.

5. CONCLUSION

Animation is essential in marketing and advertising, such as TV commercials, web banners, and print advertising. Animated advertising positively impacts recall, recognition, memory, and attention, as well as other attributes. Use of animation in

advertising is a vast area requiring further empirical studies from around the globe and from different cultural contexts and consumer age ranges.

6. LIMITATIONS AND FUTURE STUDY

The strengths of this work are that it updates and builds upon the existing literature by providing a systematic global evidence review of the influential factors related to the use of animation in advertising and its effectiveness. However, there are several limitations to this study, most notably the lack of (i) studies from the Middle East and African countries, (ii) detail on advertising policies, (iii) limited assessment across multiple media or other forms of marketing, (iv) a lack of statistical analysis or reporting, and the heterogeneity in the study design and effect measures of the reviewed literature. Future research should study cross-cultural effects or the impacts of inappropriate use of animations in advertising toward brand attitude and recognition; these studies would be of great interest. Further exploration of the roles of animation and the use of related technologies in advertising is also required.

REFERENCES

- Ausman, B. D., Lin, H., Kidwai, K., Munyofu, M., Swain, W. J., & Dwyer, F. (2004). Effects of Varied Animation Strategies in Facilitating Animated Instruction. *Association for Educational Communications and Technology*.
- Avery, R. J., & Ferraro, R. (2000). Verisimilitude or advertising? Brand appearances on prime-time television. *Journal of Consumer Affairs*, 34(2), 217-244.
- Bargh, J. A. (2002). Losing consciousness: Automatic influences on consumer judgment, behavior, and motivation. *Journal of consumer research*, 29(2), 280-285.
- Bellizzi, J. A., & Hite, R. E. (1992). Environmental color, consumer feelings, and purchase likelihood. *Psychology &*

- marketing*, 9(5), 347-363.
- Broadbent, D. E. (2013). *Perception and communication*. Elsevier.
- Bryant, J., & Miron, D. (2003). Excitation-transfer theory and three-factor theory of emotion. In *Communication and emotion* (pp. 39-68). Routledge.
- Bush, A. J., Hair Jr, J. F., & Bush, R. P. (1983). A content analysis of animation in television advertising. *Journal of Advertising*, 12(4), 20-41.
- Campbell, C., & Marks, L. J. (2015). Good native advertising isn't a secret. *Business horizons*, 58(6), 599-606.
- Das, S. (2021). A systematic study of integrated marketing communication and content management system for millennial consumers. In *Innovations in digital branding and content marketing* (pp. 91-112). IGI Global.
- Diao, F., & Sundar, S. S. (2004). Orienting response and memory for web advertisements: Exploring effects of pop-up window and animation. *Communication research*, 31(5), 537-567.
- Dibble, J. L., Hartmann, T., & Rosaen, S. F. (2016). Parasocial interaction and parasocial relationship: Conceptual clarification and a critical assessment of measures. *Human Communication Research*, 42(1), 21-44.
- Dyer, G. (2008). *Advertising as communication*. Routledge.
- Ellis, D., & Haugan, M. (1997). Modelling the information seeking patterns of engineers and research scientists in an industrial environment. *Journal of documentation*.
- Fink, A. (2019). *Conducting research literature reviews: From the internet to paper*. Sage publications.
- Fullagar, C., & Barling, J. (1983). Social Learning Theory: A Psychological Approach to Advertising Effectiveness? *South African Journal of Psychology*, 13(1), 18-22.
- Gaur, A., & Sweta, M. (2021). Digital Marketing: A Conceptual Framework. Proceedings of International Conference on "Embracing Change & Transformation-Breakthrough Innovation and Creativity."
- Goel, D., & Upadhyay, R. (2017). Effectiveness of use of Animation in Advertising: A Literature Review. *International Journal of Scientific Research in Network Security and Communication (IJSRNSC)*, 5(3), 146-159.
- Hollebeek, L. D., Sprott, D. E., Andreassen, T. W., Costley, C., Klaus, P., Kuppelwieser, V., Karahasanovic, A., Taguchi, T., Islam, J. U., & Rather, R. A. (2019). Customer engagement in evolving technological environments: synopsis and guiding propositions. *European Journal of Marketing*.
- Hong, D. H., & Choi, C.-H. (2000). Multicriteria fuzzy decision-making problems based on vague set theory. *Fuzzy sets and systems*, 114(1), 103-113.
- Hsiao, C.-H., & Tang, K.-Y. (2021). Who captures whom—Pokémon or tourists? A perspective of the Stimulus-Organism-Response model. *International Journal of Information Management*, 61, 102312.
- Hsu, H.-C., Lai, C.-S., & Chen, C.-H. (2007). Extrinsic cue of warranty by selling through a reputable website. *Journal of Advertising Research*, 47(2), 158-164.
- Ibraheem, N. A., Hasan, M. M., Khan, R. Z., & Mishra, P. K. (2012). Understanding color models: a review. *ARPN Journal of science and technology*, 2(3), 265-275.
- Kashif, M., Altaf, U., Ali, S., Asif, U., Ayub, H. M., Abeer, W., & De Run, E. C. (2012). Pakistani childrens' views of tv advertising [Article]. *Trziste*, 24(2), 245-261. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-84873870710&partnerID=40&md5=ba4d8c6930c70e5ef67fbaf3fe883fb4>
- Kashima, Y., Kashima, E., Farsides, T., Kim, U., Strack, F., Werth, L., & Yuki, M. (2004). Culture and context-sensitive self: The amount and meaning of context-sensitivity of phenomenal self differ across cultures. *Self and Identity*, 3(2), 125-141.

- Katz, E., Blumler, J. G., & Gurevitch, M. (1973). Uses and Gratifications Research. *The Public Opinion Quarterly*, 37(4), 509-523. <http://www.jstor.org/stable/2747854>
- Kuisma, J., Simola, J., Uusitalo, L., & Öörni, A. (2010). The Effects of Animation and Format on the Perception and Memory of Online Advertising [Article]. *Journal of Interactive Marketing*, 24(4), 269-282. <https://doi.org/10.1016/j.intmar.2010.07.002>
- Lagomarsino, M., & Suzanne Suggs, L. (2018). Choosing imagery in advertising healthy food to children: Are cartoons the most effective visual strategy? [Article]. *Journal of Advertising Research*, 58(4), 487-498. <https://doi.org/10.2501/JAR-2018-003>
- Lang, A. (2000). The limited capacity model of mediated message processing. *Journal of communication*, 50(1), 46-70.
- Lee, J., & Ahn, J. H. (2012). Attention to banner ads and their effectiveness: An eye-tracking approach [Article]. *International Journal of Electronic Commerce*, 17(1), 119-137. <https://doi.org/10.2753/JEC1086-4415170105>
- Lee, J. H., Kim, Y. J., Kim, Y. W., Park, S., Choi, Y.-i., Kim, Y. J., Park, D. K., Kim, K. G., & Chung, J.-W. (2019). Spotting malignancies from gastric endoscopic images using deep learning. *Surgical endoscopy*, 33(11), 3790-3797.
- Li, M., Chen, Y., Wang, J., & Liu, T. (2020). Children's attention toward cartoon executed photos [Article]. *Annals of Tourism Research*, 80, Article 102799. <https://doi.org/10.1016/j.annals.2019.10.2799>
- Liyanagunawardena, T. R., Adams, A. A., & Williams, S. A. (2013). MOOCs: A systematic study of the published literature 2008-2012. *International Review of Research in Open and Distributed Learning*, 14(3), 202-227.
- Lu, X., Zhao, X., & Xue, L. (2016). Is combining contextual and behavioral targeting strategies effective in online advertising? *ACM Transactions on Management Information Systems (TMIS)*, 7(1), 1-20.
- Mattke, J., Maier, C., Reis, L., & Weitzel, T. (2021). In-app advertising: a two-step qualitative comparative analysis to explain clicking behavior [Article]. *European Journal of Marketing*, 55(8), 2146-2173. <https://doi.org/10.1108/EJM-03-2020-0210>
- Meyers-Levy, J., & Malaviya, P. (1999). Consumers' processing of persuasive advertisements: An integrative framework of persuasion theories. *Journal of marketing*, 63(4_suppl1), 45-60.
- Mitchell, T. A., & Nelson, M. R. (2018). Brand placement in emotional scenes: Excitation transfer or direct affect transfer? *Journal of Current Issues & Research in Advertising*, 39(2), 206-219.
- Montoya, R. M., Horton, R. S., Vevea, J. L., Citkowitz, M., & Lauber, E. A. (2017). A re-examination of the mere exposure effect: The influence of repeated exposure on recognition, familiarity, and liking. *Psychological bulletin*, 143(5), 459.
- North, M., & Ficorilli, M. (2017). Click me: An examination of the impact size, color, and design has on banner advertisements generating clicks [Article]. *Journal of Financial Services Marketing*, 22(3), 99-108. <https://doi.org/10.1057/s41264-017-0028-3>
- Papacharissi, Z., & Rubin, A. M. (2000). Predictors of Internet Use. *Journal of Broadcasting & Electronic Media*, 44(2), 175-196. https://doi.org/10.1207/s15506878jobem4402_2
- Potter, W. J. (2012). *Media effects*. Sage Publications.
- Rasmussen, L. (2018). Parasocial interaction in the digital age: An examination of relationship building and the effectiveness of YouTube celebrities. *The Journal of Social Media in Society*, 7(1), 280-294.

- Rose, G. M., Merchant, A., & Bakir, A. (2012). Fantasy in food advertising targeted at children. *Journal of Advertising*, 41(3), 75-90.
- Rubin, R. B., & McHugh, M. P. (1987). Development of parasocial interaction relationships.
- Ruiz, S., & Sicilia, M. a. (2004). The impact of cognitive and/or affective processing styles on consumer response to advertising appeals. *Journal of business Research*, 57(6), 657-664.
- Sego, T., & Lee, J. Y. (2012). Executional Elements in Banner Advertising: A Cross-Cultural Comparison [Article]. *Journal of Current Issues and Research in Advertising*, 33(2), 301-316. <https://doi.org/10.1080/10641734.2012.700811>
- Singh, S. (2006). Impact of color on marketing. *Management decision*.
- Sundar, S. S., & Kalyanaraman, S. (2004). Arousal, memory, and impression-formation effects of animation speed in web advertising. *Journal of Advertising*, 33(1), 7-17.
- Turow, J. (1997). *Breaking up America: Advertisers and the new media world*. University of Chicago Press.
- Wasko, J. (2020). *Understanding Disney: The manufacture of fantasy*. John Wiley & Sons.
- Yim, M. Y.-C., Cicchirillo, V. J., & Drumwright, M. E. (2012). The impact of stereoscopic three-dimensional (3-D) advertising. *Journal of Advertising*, 41(2), 113-128.
- Zhai, X., Wang, M., & Ghani, U. (2020). The SOR (stimulus-organism-response) paradigm in online learning: an empirical study of students' knowledge hiding perceptions. *Interactive Learning Environments*, 28(5), 586-601.
- Zhou, F., Su, Q., & Mou, J. (2021). Understanding the effect of website logos as animated spokescharacters on the advertising: A lens of parasocial interaction relationship [Article]. *Technology in Society*, 65, Article 101571. <https://doi.org/10.1016/j.techsoc.2021.101571>
- Zillmann, D. (2008). Excitation transfer theory. *The international encyclopedia of communication*.