

EVALUATION OF THE EMOTIONAL RESPONSES TO ARTIFICIAL INTELLIGENCE INFLUENCERS IN THAILAND

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ABSTRACT. *Influencers refer to a person who exhibits behavior that may be intentionally or unintentionally motivating another person, which will influence the opinions of consumers both in the real world and on social media by creating noticeable content on various platforms. It affects a person's decision to purchase and use goods or services. Nowadays, there are two main characteristics: Traditional Influencers and AI Influencers. The researchers tested how people in society feel about both types of influencers. The Self-Assessment Manikin (SAM) was used to measure feelings in 2 aspects, namely the valence and the arousal aspect, which collected data by simple random method. There were 300 participants in this research. Studying the emotions of participants in terms of valence and arousal towards Traditional Influencers and AI Influencers, it was found that both the valence and arousal of Traditional Influencers are higher than AI Influencers. The results can be used to improve marketing strategies in line with consumer sentiments toward influencers.*

Keywords: Emotional responses, Traditional Influencers, AI Influencers, Valence, Arousal

1. Introduction. Currently, marketing using influencers to persuade consumers is being discussed increasingly, both from marketers' circles, academic perspectives, and consumer perspectives. It is often popularly referred to as influencer marketing, which means using influencers to support or help with product placement by presenting products through the channels of people or organizations that have influenced thoughts or behavior through social media [1]. Marketers choose widely popular people with the right personality for the product and a large following on social media as a channel to present the product to the target audience [2]. Influencer marketing is considered an effective method that can reach target consumers according to their interests; therefore, it is commonly used as a short-term and digital marketing strategy long-term for retailers [3]. Having an influencer base with a large following empowers you to reach potential customers who are difficult to access through social media channels. Choosing powerful influencers to target the desired audience can drive tremendous marketing success [4]. The study of consumer behavior

toward influencer marketing has expanded in many aspects. Specifically, the study of persuasion in the context of influencer marketing and studying the sociological motivations that drive consumers to pursue and lead to purchasing decisions is another issue that a number of academics are interested in [5-7].

A study by Lou and Yuan [2] found that 89 percent of marketers believe influencer marketing activities provide a return on investment equal to or greater than other marketing strategies, in line with Martínez-López et al. [7], who found that influencer-based marketing yielded 11 times more results than traditional advertising, and also in line with a study by Jansen and Hinz [8] in which the results showed that using Marco influencers who have a large following will also result in more effective marketing. During the COVID-19 pandemic, people must quarantine themselves at home, and the use of influencers to access consumers through social media was one of the factors in promoting marketing during this time [9]. Thus, the market value of using social media influencers is experiencing rapid growth, and social media influencers are also increasing rapidly. Theoretical studies in both management and marketing are therefore increasing [10]. Many consumers recognize the brand from social media influencers. Therefore, it is marketed using influencers who have a role or influence in thinking and influence the decisions of the target group. It is a strategy that uses the power of word of mouth from famous people on social media and influences consumers' purchasing decisions to help reach the target audience directly [11]. Factors that make consumers who follow celebrities on social media are various, such as sincerity in product presentation, creative presentation inspiration, or even creating envy. Such factors affect trust and purchase frequency differently [12].

Now, influencers influence people's decisions, such as shopping, dressing, or eating. We are often used to human influencers such as famous people, celebrities, singers, and artists, but today's technology is very advanced. The rapidly changing industrial environment and developments in Information and Communications Technology (ICT) have a grand impact on individuals and organizations. Therefore, many researchers have tried to identify and understand the factors that influence the intentions and behavior of companies and individuals [13]. It creates another type of influencer called Artificial Intelligence (AI) Influencers, who are becoming popular now. Moreover, AI Influencers also have an influence on people's decisions as well as human influencers. AI Influencers are computer-generated artificial characters with a robust social media presence/fame. They are the people who endorse a brand of product or service through social media platforms such as YouTube, Instagram, Snapchat, Pinterest, Facebook, Tumblr, or personal blogs [14,15]. They are usually similar to humans in their physical appearance and personality and can think and perform tasks like humans over software and algorithms [16]. AI Influencers have been purpose-built to promote certain brands, products, or services, as is typically associated with the regular human influencers [17]. AI Influencers in marketing allow companies to create highly targeted and personalized content that can resonate with specific audiences using advanced algorithms and machine learning techniques. The use of influencers in marketing continues to increase, which has been proven effective in generating conversion and sales [18] because it is one factor that influences customers' purchasing decisions [19].

AI Influencers can analyze data with consumer behavior and preferences to create content tailored to the interests and needs of their followers. Besides, AI Influencers were designed to have a distinctive and eye-catching look through image-based platforms such as Instagram. For example, most of them are similar to humans in terms of their bodies. Appearance, personality, and demeanor they characterize through posts and interactions between them and their followers can help to draw attention to a brand or product. They can also create content at a time, allowing them to engage with audiences in real time and build up a large following quickly [20]. In addition, they are more effective in engaging customers because they can conduct meaningful conversations with each consumer and learn from every conversation "as a result of AI assessment of behavior and reactions to

a multitude of different variations” [21]. Firms also find AI Influencers attractive because they are associated with less risk involved in a scandal [22]. The arrival of AI Influencers creates new options for brands because when brands make an appointment to shoot a novel product review or shoot a new music video with a human influencer. There might be an emergency by influencer, that person may be suddenly sick, or there is a significant event in its place causing brands to waste time and postpone the launch of that product, which is different from AI Influencers that can work according to orders, everything and all the time without complaining, without being tired or sick, of course, no matter how much work there is. In this way, it is important to measure human emotions by analyzing the valence and arousal related to an individual’s affective response to Traditional Influencers and AI Influencers. However, no paper examined.

The purpose of this paper is to measure human emotions by analyzing the valence and arousal related to an individual’s affective response to Traditional Influencers and AI Influencers in Thailand. This paper is organized as follows. In Section 2, we introduce Traditional Influencers and AI Influencers and explain the problem considered in this paper. In Section 3, the main results are explained. In Section 4, control design is presented. Lastly, Section 5 gives some concluding remarks.

2. Problem Statement and Preliminaries. Humans naturally tend to form emotional connections with others, including virtual entities. Even though AI Influencers are not human, they are designed to imitate behavior of human appearances and communication styles that cause consumers to feel familiar with and attached to these virtual personalities. This emotional connection can foster deeper engagement and trust, leading to increased brand affinity. They help build a company’s brand value. The constant attention and interaction between the AI Influencer and the customer allows the artificial intelligence engine to quickly adapt to the customer’s requirements, increasing its reliability. The lack of time constraints on the availability of AI Influencers to interact dramatically contributes to the level of engagement with customers [23]. While some consumers embrace AI Influencers, others may approach them skeptically and mistrustfully. The realization that AI Influencers are computer-generated can raise doubts about the authenticity and credibility of their endorsements and recommendations. Consumers may question the intentions behind AI Influencer campaigns, perceiving them as manipulative or solely profit-driven. This skepticism can hinder brand trust and engagement, especially if consumers perceive the content as insincere or lacking genuine human experiences.

Therefore, this paper aims to measure human emotions by analyzing the valence and arousal related to an individual’s affective response to various influencers.

3. Main Results. The results of this paper of the experience of knowing AI Influencers found that most of the participants had never seen AI Influencers before, representing 67.9%. The results of the study of participants’ emotions in terms of valence and arousal toward Traditional Influencers and AI Influencers are shown in Figure 1.

The results are as follows: The research results showed that the valence of Traditional Influencers was 6.94, meaning that the participant had a good impression of Traditional Influencers, while the valence of AI Influencers was 4.57, indicating that the participant had a good impression of Traditional Influencers, but AI Influencers were moderate. For the arousal of Traditional Influencers, the value was 6.52, indicating that the participant was aroused or excited towards the Traditional Influencers at a relatively good level, while the arousal of the AI Influencers was 4.44, denoting that the participant was aroused or excited towards the AI Influencers at a moderate level. Therefore, the valence and arousal of Traditional Influencers are higher than AI Influencers.

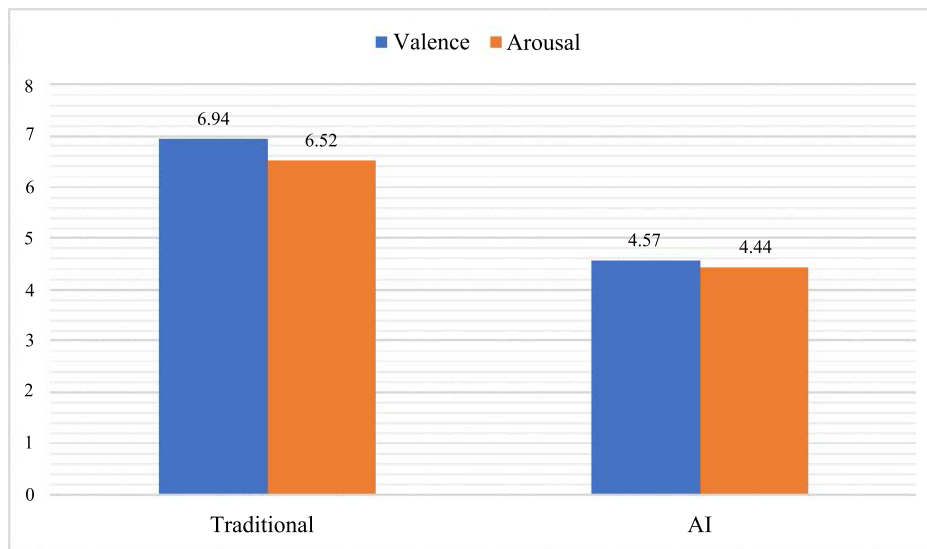


FIGURE 1. SAM score results of influencers

The results of the question “Which influencer will participants choose?” revealed an interesting trend among the participants. The majority, comprising 78.6% of the respondents, opted for Traditional Influencers. However, a notable minority of 21.4% of participants broke away from the conventional norm and expressed a preference for AI Influencers.

4. Control Design. SAM has been successfully used to assess emotional responses in various situations, including reactions to pictures. Across a wide range of experimental configurations, the SAM scale has been used with great success to categorize emotional stimuli in the valence and arousal dimensions. Valence refers to the subjective feeling of positivity or negativity of an individual’s emotional experience. Valence ranges from unpleasant to pleasant. Arousal describes how excited or activated a person’s body is as a result of their emotional experience. Arousal ranges from calm to excite. The experiment was conducted on a questionnaire via Google form.

Participants were presented with pictures of 2 types of influencers which are Traditional Influencers and AI Influencers, then after informed to evaluate them using the SAM scale. The participants in this study included 300 people randomly, indicating that women make up the majority, comprising 62.9% of the participants, while men constitute 37.1%. The participants completed the online questionnaire using the Google form. The questionnaire was divided into two parts. Part 1 inquired about the general information of the participants consisting of gender, and age. Part 2 questioned emotions and feelings toward the two types of influencers, which were the levels of valence and arousal using SAM. After completing the general information, the participants watched the type 1 influencer pictures. Then they respond to the emotional assessment from two dimensions of assessment, namely valence, and arousal, using SAM assessment on a 9-level rating scale, as shown in Figure 2. When participants complete all dimensions of assessment, they proceed to the second type of influencers, which is AI Influencer. Participants then assess all dimensions of emotion. It took about 5 minutes to complete the experiment. In this study, we have two different types of influencers: Traditional Influencers and AI Influencers. We have used the picture of the Thai influencer with the top two followers in both types. The picture of influencers is shown in Table 1.

5. Conclusions. The conclusions from this study suggest that people are still more interested in Traditional Influencers than in AI Influencers. From the comparison of the two types of influencers, in the valence dimension, the result found that the Traditional

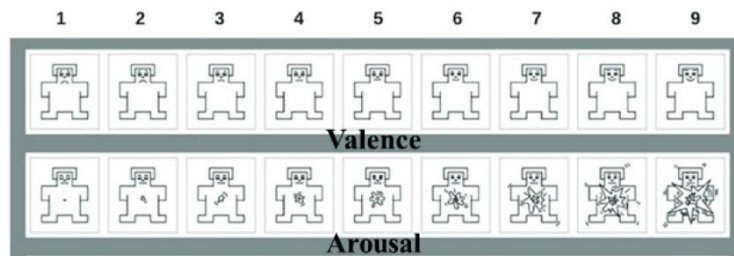






FIGURE 2. SAM scale

TABLE 1. Types of influencers

| Influencers types | | | |
|---|---|--|---|
| Type 1 | | Type 2 | |
| Traditional Influencers | | AI Influencers | |
|  |  |  |  |
| [24] | [25] | [26] | [27] |

Influencers had an effect on human emotion in the valence dimension at the mean of 6.94, which is higher than the AI Influencers, probably because Traditional Influencers have a certain level of spontaneity, humor, and relatability that is difficult to program into AI models. Finally, in terms of arousal, when comparing both types of influencers, it was found that the Traditional Influencers affect human emotion at a mean of 6.52, which is still higher than the AI Influencers. It could be because AI Influencers can offer efficiency and consistency; they lack the nuanced qualities that human influencers embody, making them less appealing to many individuals seeking genuine connections and trustworthy recommendations in the realm of influencer marketing. Therefore, while AI Influencers have their merits, it is evident that people still prefer the authenticity provided by Traditional Influencers. Finally, future research should consider population-based studies using global data to capture perceptions from participants from diverse geographies to make it more international. Additionally, it should be studied about the impact of factors influencing AI Influencers including interactive formats, humanity strangeness, and overall look and feel may lead to further research.

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REFERENCES

[1] P. Breves, N. Liebers, M. Abt and A. Kunze, The perceived fit between Instagram influencers and the endorsed brand: How influencer-brand fit affects source credibility and persuasive effectiveness, *Journal of Advertising Research*, vol.59, no.4, pp.440-454, 2019.

- [2] C. Lou and S. Yuan, Influencer marketing: How message value and credibility affect consumer trust of branded content on social media, *Journal of Interactive Advertising*, vol.19, no.1, pp.58-73, 2019.
- [3] C. Campbell and J. Farrell, More than meets the eye: The functional components underlying influencer marketing, *Business Horizons*, vol.63, no.4, pp.469-479, 2020.
- [4] L. Janssen, A. Schouten and E. Croes, Influencer advertising on Instagram: Product-influencer fit and number of followers affect advertising outcomes and influencer evaluations via credibility and identification, *International Journal of Advertising*, vol.41, no.1, pp.101-127, 2022.
- [5] H. Masuda, S. Han and J. Lee, Influencer advertising on Instagram: Product-influencer fit and number of followers affect advertising outcomes and influencer evaluations via credibility and identification, *Technological Forecasting and Social Change*, vol.174, 121246, 2022.
- [6] H. Kim, Keeping up with influencers: Exploring the impact of social presence and parasocial interactions on Instagram, *International Journal of Advertising*, vol.41, no.3, pp.414-434, 2022.
- [7] F. J. Martínez-López, R. Anaya-Sánchez, M. F. Giordano and D. Lopez-Lopez, Behind influencer marketing: Key marketing decisions and their effects on followers' responses, *Journal of Marketing Management*, vol.36, nos.7-8, pp.579-607, 2020.
- [8] N. Jansen and O. Hinz, Inferring opinion leadership from digital footprints, *Journal of Business Research*, vol.139, pp.1123-1137, 2022.
- [9] F. Femenia-Serra, U. Gretzel and A. Alzua-Sorzabal, Instagram travel influencers in #quarantine: Communicative practices and roles during COVID-19, *Tourism Management*, vol.89, 104454, 2022.
- [10] J. Lee, S. Sudarshan, K. Sussman, L. Bright and M. Eastin, Why are consumers following social media influencers on Instagram? Exploration of consumers' motives for following influencers and the role of materialism, *International Journal of Advertising*, vol.41, no.1, pp.78-100, 2022.
- [11] A. Ermeç, How effective are social media influencers recommendations the effect of message source on purchasing intention and e-word of mouth (WOM) from a para-social interaction perspective, *Journal of Business Research-Turk*, vol.14, no.1, pp.1077-1095, 2022.
- [12] J. Wielki, Analysis of the role of digital influencers and their impact on the functioning of the contemporary on-line promotional system and its sustainable development, *Sustainability*, vol.12, no.17, 2020.
- [13] J. S. Hwang and H. J. Lee, A meta-analysis of advanced UTAUT variables in the ICT industry: An analysis of published papers in Korean journals, *International Journal of Advertising*, vol.14, no.2, pp.757-766, 2018.
- [14] G. S. Dhanesh and G. Duthler, Relationship management through social media influencers: Effects of followers' awareness of paid endorsement, *Public Relations Review*, vol.45, 101765, 2019.
- [15] E. Moustakas, N. Lamba, D. Mahmoud and C. Ranganathan, Blurring lines between fiction and reality: Perspectives of experts on marketing effectiveness of virtual influencers, *2020 International Conference on Cyber Security and Protection of Digital Services (Cyber Security)*, pp.1-6, 2020.
- [16] V. Kumar, B. Rajan, R. Venkatesan and J. Lecinskiand, Understanding the role of artificial intelligence in personalized engagement marketing, *California Management Review*, vol.61, no.4, pp.135-155, 2019.
- [17] E. Bungei, *The Effect of Artificial Intelligence (AI) Influencers on Customer in the Saudi Arabia*, Masinde Muliro University of Science and Technology, DOI: 10.13140/RG.2.2.13668.04486, 2022.
- [18] G. Mileva, *How Artificial Intelligence (AI) Is Changing Influencer Marketing*, Influencer MarketingHub, <https://influencermarketinghub.com/ai-influencer-marketing>, 2023.
- [19] C. Klaysung, Factors affecting consumer buying decisions about goods on social media in Bangkok, *Dhurakij Pundit Communication Arts Journal*, vol.15, no.1, pp.37-69, 2021.
- [20] R. Byers, *What Are AI Influencer?*, <https://goatagency.com/blog/influencer-marketing/ai-influencers/#page-jump-1>, 2023.
- [21] C. Campbell, S. Sands, C. Ferraro, H.-Y. (Jody) Tsao and A. Mavrommatis, From data to action: How marketers can leverage AI, *Business Horizons*, vol.63, no.2, pp.227-243, 2020.
- [22] V. L. Thomas and K. Fowler, Close encounters of the AI kind: Use of AI Influencers as brand endorsers, *Journal of Advertising*, vol.50, no.1, pp.11-25, 2021.
- [23] M. Gerlich, The power of virtual influencers: Impact on consumer behaviour and attitudes in the age of AI, *Administrative Sciences*, vol.13, no.8, 178, DOI: 10.3390/admsci13080178, 2023.
- [24] *Lalisa*, https://www.instagram.com/lalalalisa_m, Accessed on February 20, 2023.
- [25] *Davikah*, <https://www.instagram.com/davikah>, Accessed on February 20, 2023.
- [26] *Katii*, <https://www.instagram.com/katii.katie>, Accessed on February 20, 2023.
- [27] *Ailynn*, https://www.instagram.com/ai_ailynn, Accessed on February 20, 2023.