



## Determinants of the acceptance of virtual influencers as digital promoters in the retail industry

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### Abstract

Virtual influencers are one of the modern methods in digital marketing that have begun to spread globally, and are expected to become the basic image of digital influencers. Therefore, there is great interest among both researchers and companies. Therefore, this study attempted to address this topic. This study aimed to identify the extent of acceptance of virtual influencers, and to identify the dimensions through which virtual influencers can be accepted as digital promoters among Generation Z in the Kingdom of Saudi Arabia. The main question of this study was: "What are the dimensions of acceptance of virtual influencers as digital promoters among Generation Z?" Therefore, the study attempted to test hypotheses to identify the effect of the relationship between the dependent variable, which is acceptance of the virtual influencer, on the independent variables represented by credibility with its dimensions (trustworthiness, expertise, attractiveness, and similarity), the Available credibility positively variable with its dimensions (acquaintance, friendship, and understanding), and the variable of the appropriate content provided by the virtual influencer. For the purpose of collecting data, we relied on distributing an electronic questionnaire to 800 people in Saudi Arabia. The results showed that virtual influencers must be worthy of consumers' trust, similar to them in personal and life aspects, and attractive in order to be accepted by consumers. It also concluded that it is important for there to be understanding between the virtual influencer and the consumer to understand his personality and provide what suits him, and for friendship and understanding to form between them. Finally, the study concluded the importance of the content provided by the virtual influencer, which must suit every consumer and support the trust and credibility of the virtual influencer. Therefore, the study recommends the need for companies to pay attention to the virtual influencer because it will become the basic form of digital influencers, ensuring that they provide the necessary dimensions for their use.

### Introduction

Digital marketing has recently emerged and provided many opportunities for organizations. Especially during the COVID-19 pandemic outbreak, organizations that were prepared and that switched to digitization achieved large gains (O'Brien and Forster 2020). Digitization is developing rapidly, and the methods and means of digital marketing have developed—the most important of which is now influencer marketing. Owing to consumers blocking ads, known as advertising blindness (Kim and Kim 2021, 408:411), many organizations have shifted from advertising promotion to influencer marketing, which provides greater opportunities to promote brands (Lee and Kim 2020, 240: 248). Therefore, social media has become a promotional tool preferred by marketers, especially when marketing their products to Generation Z. One of the most

important methods is through digital influencers. Nearly 77 % of brands use digital influencers to promote their products (Campbell et al. 2022, 115:118). Marketers find it best to overcome ad blocking by consumers, as approximately 58% of online ads are blocked by consumers (Kim, Giroux, and Lee 2021, 1150:1155). The Oxford Dictionary defines an influencer as 'a person who has the ability to influence consumers' behavior and motivate them to purchase a product by promoting it through social media' (Bloomberg 2020).

Owing to the great success of influencers, computer-generated robots known as virtual influencers have recently begun emerging, thanks to artificial intelligence techniques. They act as an alternative to the human digital influencers who enjoy their social and professional lives and express their thoughts and emotions. They have begun

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spreading and meeting the approval of some consumers as well as opposition from others, and they may face very strong opposition from most consumers (Schouten, Janssen, and Verspaget 2020, 268:279). The emergence of virtual influencers has resulted in ‘Uncanny Valley’ whereby consumers are shocked to find out that a virtual influencer whom they watch is just a robot. While consumers accept the idea of a robot influencer, to some extent, the robot is not a complete analogue of a human, and when robots imitate humans, this acceptance changes to repulsion and disgust, which may cause fear and crying (Arsenyan and Mirowska 2021, 160:171).

In addition, many consumers, especially in emerging markets that are in the field of digital marketing (as in the Middle East countries), are not familiar with digital influencers. This raises an important question should they become familiar with them, ‘would they accept virtual influencers and would they deal with them as they deal with human digital influencers?’ They are already connected and responsive to human digital influencers, with many of them even enjoying high credibility with consumers, especially with Generation Z, and they influence consumers’ purchasing decisions largely (Casaló, Flavián, and Ibáñez-Sánchez 2020, 511:517). This matter is worth examining to find out the aspects that help consumers, who are partially or completely opposed to this marketing idea, to accept virtual influencers with who they are familiar. The same applies to consumers who are not familiar with virtual influencers; this category must be introduced to them in a typical manner that can convince and attract them and influence their purchasing decisions.

This study aims to identify how much consumers accept virtual influencers, and whether they accept them completely or with a set of reservations and conditions. Accordingly, the study attempts to identify the dimensions in which most consumers accept virtual influencers, for digital marketing companies to take advantage of virtual influencers in promoting brands.

As it was clear from the study that accepting the virtual influencer as a digital promoter requires credibility, which depends on the virtual influencer being worthy of the consumers’ trust and attracting them to deal with him, which will only be achieved by his similarity with them., also clarified that the acceptance of the virtual influencer depends on the relevant content that suits the category presented to him, in addition to his ability to interact with them through acquaintance to know their personality, understanding with them and making friendship with them..

The study is important as it addresses the conviction of organizations regarding the importance of virtual influencers, as organizations have become increasingly

interested in virtual influencers, which are expected to be the future form of online influencers. The virtual influencers’ dimensions may make them superior to human influencers, who in turn have the ability to overcome advertising blindness.

Academics have been interested in the topic of digital influencers in general, and some are interested in virtual influencers as well as how they can be used to promote brands. The current study contributes to the literature by exploring innovative solutions through which brands can access consumers through virtual influencers and benefit from it in sales growth.

The study focused on the Kingdom of Saudi Arabia (KSA)—a promising market for digital transformation, which it seeks to localize. Generation Z is also associated with digital marketing and digital influencers .

The current study attempts to develop solutions for consumers to accept virtual influencers without alienation. Therefore, the main question for this study can be posed as, ‘What are the dimensions of Virtual Influencers Acceptance as Digital Promoters among generation Z?’ Branching from this main question of the study are sub-questions that include the dimensions of building the proposed model: Would the availability of virtual influencers’ credibility, as well as its sub-dimensions (trustworthiness, expertise, similarity, and attractiveness), cause consumers to accept them as a digital promoters to raise brand awareness among Generation Z? Would virtual influencers’ double social interaction with consumers, and its sub-dimensions (friendship, understanding, and recognition), cause them to accept virtual influencers as digital promoters of brand awareness among Generation Z? Would virtual influencers’ relevant content lead to their acceptance as digital promoters to raise brand awareness among Generation Z?

The rest of this article is designed as follows: In it, the Literature review of the study and the hypotheses of the study will be dealt with, then the results of the study will be presented and Discussion, and finally, a presentation of the study’s conclusions, and then the study will be concluded with a presentation of the references.

## **Literature review**

### **❖ The virtual influencer**

#### **1.The concept of virtual influencer**

Other than using human digital influencers, organizations have also begun using new ways to promote brands and influence consumers, such as using virtual influencers (Wang and Scheinbaum 2018, 25:31), Many consumers do not perceive any difference between a human

influencer and a virtual one, as they both promote products (Thomas and Fowler 2021, 17:24). Some consumers are fascinated by the high-tech experience do not mind using it (Influencer Marketing Hub 2021), However, many consumers are skeptical about the experience and consider that virtual influencers lack credibility, which raises many concerns (Drenten, Gurrieri, and Tyler 2020, 55:60). Where organizations encounter problems while choosing relevant human digital influencers who are similar to their brand's consumers (Cauffman and Goanta 2021, 768:771), However, organizations can overcome this problem by setting up virtual influencers that are similar to the target consumers (Kostić Stanković, Bijakšić, and Ćorić 2020, 151:157).

## **2. The credibility of the virtual influencer**

It is noted that consumers tend to deal with virtual influencers who are close to their age, customs and traditions, country, consumers feel, and are even, inspired by them (Moustakas et al. 2020, 16:18; Parisi 2021; Reis et al. 2020, 28:232). Therefore, many consumers are not convinced by virtual influencers representing them in cosmetics and hair care (Bloomberg 2020), because of their conviction that these virtual influencers are just robots and cannot try these products themselves; as such, they cannot be convinced of what the virtual influencers are promoting (Silva et al. 2020, 145:153) .

Also, consumers interact more with influencers who specialize in promoting one brand, and virtual influencers are characterized by their interaction with one, this is difficult for human influencers (Sokolova and Kefi 2020, 82:90). Brands require influencers who promote their brand to understand and know more about consumers, and then cultivate friendships that make them more interactive (Lisichkova and Othman 2017; Splendid Research 2019).

Trustworthiness and credibility also decrease when consumers question the existence and social interaction of virtual influencers (Taylor 2020). Therefore, it is recommended that virtual influencers should communicate with consumers constantly through instant responses and chats, which human influencers may not be able to do (Ghapanchi et al. 2020, 5053:5062), thus increasing the relationship between them and consumers and, consequently, increasing the degree of interaction (Chaturvedi, Kulshreshtha, and Tripathi 2020, 410:415).

However, virtual influencers face a problem when answering questions, which they answer through specific software using artificial intelligence techniques (Harrigan et al. 2021, 56). When asked unprogrammed questions, they may answer without the human understanding that can create dialogue and understand the deep meanings of these questions (Peltola 2019). Thus, their answers may be

irrelevant to the questions posed to them, which makes them lose much of their credibility (Jiménez-Castillo and Sánchez-Fernández 2019, 376:374). A question is also raised about whether artificial intelligence techniques are capable of responding the responses that virtual influencers deliver, or whether the response are provided by the work team behind the virtual influencers, which affects transparency in targeting consumers (McCarthy 2018).

But some consumers may view virtual influencers as not being transparent (Schomer 2019, 275:279), because they are driven by artificial intelligence or even by unknown people, which affects their credibility, hence, not knowing who is controlling these influencers affects their transparency (Moustakas et al. 2020, 16), unlike human influencers, whose followers know them well and know their affiliations and tendencies (Mathur, Narayanan, and Chetty 2018, 14:23). consumer acceptance of the virtual influencer depends on the extent of its attractiveness, (Wiltshire, 2018) the influencer who has a high degree of physical attractiveness has a high credibility from consumers, which has a positive effect on his acceptance (Verdoodt and Feci 2019, 15:18), but studies differed in that attractiveness has an impact and it is very important to accept the virtual influencer, as they believe that the attractiveness of the virtual influencer is not important to gain consumer acceptance (Kim and Kim 2021, 409:413).

## **3. Double social interaction**

If the virtual influencer is able to form friendships with consumers, then he has reached the highest levels of credibility with them (Kadekova and Holienčinova. 2018, 97:102), which enables him to influence them in a very large way (Cotter, 2019, 910:912), so any influencer always seeks to reach this degree of reaching consumers (Silva et al, 2020, 146:159; Influencer Marketing Hub, 2021) which means access to their feelings and emotional participation Complete with them (Chance,2020; Rue, 2019; Dobрева et al, 2020, 150:157) and means a great understanding between them and the presence of many factors and characteristics common to them (Chae, 2018, 258:261) which makes them very close and understanding, and the consumer can in this way accept the opinions and suggestions of the influencer (Silva et al, 2020, 153; Bloomberg,2020). This degree of understanding, which results in friendship, will only come through the influencer knowing the characteristics and needs of the consumer completely so that he can reach him intellectually (Peltola, 2019), but also reach his feelings as well, and can influence and promote him in a distinctive way that enjoys inevitable acceptance (Arsenyan and Mirowska, 2021; Casaló et al, 2020; Dodgson, 2019, 514:516).

#### 4. The content

The content provided by the virtual influencer plays a major role in its acceptance (Dobrev et al, 2020, 154:156), as humorous content is among the most important types of content that digital influencers use in general, including discussions and storytelling content, Influencers tell stories about brands, which is a powerful way to bring influencers and followers together through a common dialogue (Wiltshire 2018). This conveys cultures, experience, events, and many personal experiences that form the brand’s aura over time and enrich its meaning (Cotter 2019, 896:899).

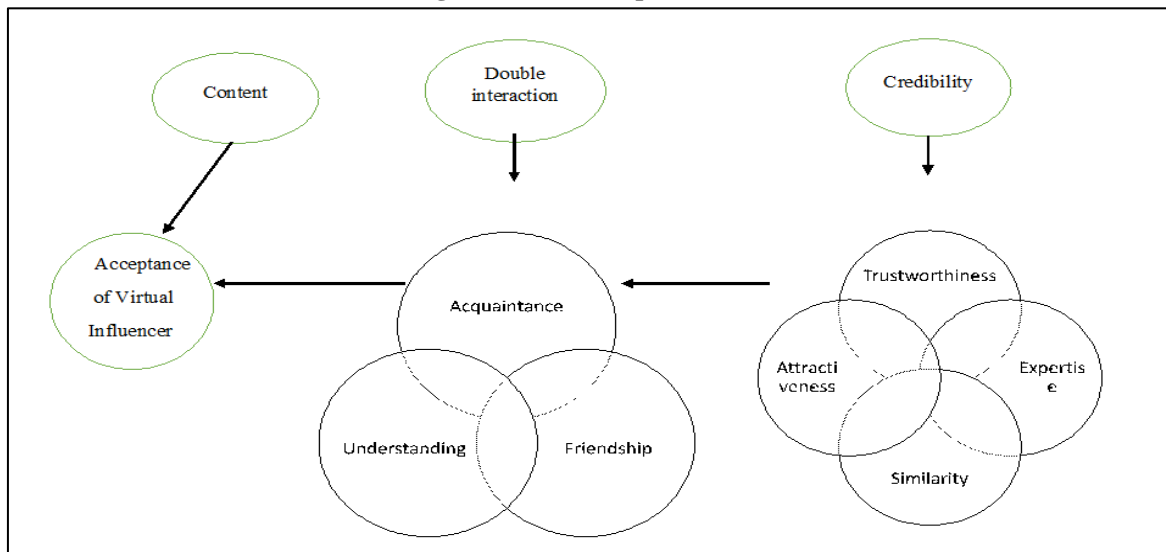
Furthermore, social media facilitates consumer participation in the content provided by influencers (Nafees et al,2020, 3), where the content provided through social media is related to values and ideas that target consumers and correspond to their personalities (Kadekova and Holienčinova 2018, 91:95). Moreover, passing these values and ideas on to consumers depends on whether the influencers interact with consumers successfully and effectively until they bear fruit toward brand awareness (Chance 2020).

Hence, virtual influencers can control the content presented more than human influencers (Casaló et al, 2020), as it is possible to produce content that is more compatible with the brand (Reis et al. 2020, 224:226) .

#### 5. The gap in the literature review

It is noted that literature review have dealt with the subject of digital influencers in general, and that few researches have dealt with virtual influencers, as they dealt with a few characteristics of the virtual influencer, and literature review did not address the dimensions through which the consumer can accept the virtual influencer, nor did any study of literature review have dealt with these dimensions on generation z or dealt with the Saudi market, which is a gap in literature review. The current study will cover this research gap in order to contribute to presenting dimensions that can influence the digital consumer’s acceptance of the virtual influencer, which organizations can benefit from in creating a virtual influencer and providing these proposed dimensions in order to be able to gain consumer acceptance and then influence them in promoting products. That can be illustrated in the conceptual model shown in Figure (1)

Figure 1. The conceptual model



256:258), and the credibility of influencers depends on trustworthiness, similarity, expertise, and attractiveness (Campbell and Grimm 2019, 117:121). To have credibility, an influencer must be attractive and loved by viewers (Dobrev, Grinnell, and Innes 2020, 146:148), be trustworthy, have expertise in their field, and resemble the target group (Drenten, Gurrieri, and Tyler 2020, 60:66). Conversely, this credibility affects their social interaction with followers directly and positively (Chae 2018, 253:259).

Correspondence and consistency are also required between influencers’ personality and the brands they

#### ❖ Hypotheses

The study is concerned with knowing the acceptance of virtual influencers as digital promoters for Generation Z, as it is the generation with the greatest interest in digital marketing, where digital influencers contribute toward awareness of this generation about the brand, recognition, and promotion of its use (Campbell et al. 2022, 30:35) .

It is noted that followers trust influencers as much as they trust their friends and family (Rue 2019). This trust emanates from their credibility, which is considered the most important pillar in influencer marketing (Chae 2018,

367:374). The consumers feel disappointed again when they feel that virtual influencers cannot act convincingly (Hinduan, Anggraeni, and Agia 2020, 127:133; Sanders 2021).

The second hypothesis is then formulated as follows:

H2: There is no significant relationship between Double social interaction and virtual influencer acceptance.

This is divided into the following sub-hypotheses:

H2a: There is no significant relationship between Friendship with consumers and acceptance of the virtual influencer.

H2b: There is no significant relationship between the acquaintance with consumers and acceptance of the virtual influencer.

H2c: There is no significant relationship between Understanding of consumers and acceptance of the virtual influencer.

Influencer marketing is based on creating strong brand images by providing relevant and reliable content that influences consumers' purchasing intent by raising brand awareness (Hu, Chen, and Davison 2019, 299:314). This produces much better results than advertising (Influencer News 2020), and consumers accept this method more as it is characterized by the fact that the promotion of brands comes naturally, without the pressure that occurs in advertisements (Harrigan et al. 2021; Liu 2019, 370:378). Using artificial intelligence technologies, it is possible to create content that suits consumers (Campbell et al. 2022, 23:29), and through these technologies, consumer data can be stored, analyzed, and dealt with (Nafees, Cook, and Stoddard 2020).

The third hypothesis can then be formulated as follows:

H3: There is no significant relationship between Relevant content interaction and virtual influencer acceptance.

#### ❖ Data

##### 1. Population and sample

The data was collected from all Generation Z users of digital marketing in KSA by using questionnaires that were distributed electronically. The questionnaire was based on a five-point Likert scale, and the responses were high, with approximately 800 questionnaires, and because the population in this case has an unknown size, as we cannot limit the number of Generation Z, Therefore, it was determined using the Morgan (1970) table, where the equation of the relevant sample size in an unknown population (since) is:  $n = z^2 / SE^2 \times P (1 - P)$ . Thus, the sample size is

$$n = (1.96)^2 / (0.05)^2 \times 0.5 (1 - 0.5) = 384$$

And to increase the certainty and obtain more reliable results, the author increased the sample to 800 participants .

promote (Nafees, Cook, and Stoddard 2020). Further, consistency between an influencer's personal and professional life is necessary for them to influence consumers and consumers' purchasing intentions positively (Dodgson 2019), as consumers trust them and seek advice from them about the brands they promote (Robinson 2020, 5:8). Digital influencers' credibility is related to their emotional ties with consumers, which is directly related to Word of Mouth and consumers' ability to make purchasing decisions (Silva et al. 2020, 146:153). Through their association, influencers affect consumers, as consumers attempt to imitate them, depending on their degree of (Gross and Wangenheim 2018, 32:37). Hence, it is necessary to choose influencers who are similar to the target group of consumers, which is provided by virtual influencers, as they are made similar to the target group of consumers (Kemp, Randon McDougal, and Syrdal 2019, 148:152). Studies indicate that the acceptance of the virtual influencer is greatly affected by the extent of his physical attractiveness (Kim et al, 2021, 1142:1148; Hinduan et al, 2020, 123:128) Consumers tend by nature to the influencer with high attractiveness, as this attractiveness enhances his credibility and trust in the consumer, which in turn affects their acceptance of him. (Campbell and Grimm, 2019, 118:122; Influencer News, 2020) Therefore, the first hypothesis can be formulated Therefore, the first hypothesis can be formulated as follows:

H1: There is no significant relationship between available credibility and acceptance of the virtual influencer.

It is divided into the following sub-hypotheses:

H1a: There is no significant relationship between trustworthiness and acceptance of the virtual influencer.

H1b: There is no significant relationship between experience and acceptance of the virtual influencer.

H1c: There is no significant relationship between attractiveness and acceptance of the virtual influencer.

H1d: There is no significant relationship between similarity and acceptance of the virtual influencer.

People use the Internet to search for social relationships, including relationships with influencers, and to cultivate friendships by understanding and getting to know each other (Campbell et al. 2022, 25:36). Studies have proven that consumers are less interactive with virtual influencers (Leighton 2019). The inability of the virtual influencers to convey feelings (Parisi 2021) and the consumer's knowledge that digital influencers lack human feelings are strong obstacles to the consumers' conviction of virtual influencers (Boyd 2019). While some opinions state that virtual influencers can be programmed to feel and respond to consumers' emotions (Martensen, Brockenhuus-Schack, and Zahid 2018, 347:352), this is not enough for many consumers (Jiménez-Castillo and Sánchez-Fernández 2019,

acceptance by consumers. The similarity variable then follows with a mean of 4.269, which indicates that, to attract consumers, similarity between virtual influencers and their target consumers is required. This is followed by the attractiveness variable with a mean of 3.983; therefore, virtual influencers must be attractive to influence consumers. The friendship variable follows the attractiveness variable with a mean of 3.728. After attracting consumers, virtual influencers must cultivate strong friendships with them. This is followed by the acquaintance variable with a mean of 3.705, which is an important factor in accepting virtual influencers. Finally, the understanding variable has a mean of 3.647.

And all study participants provided informed consent, and the study design was approved by the appropriate ethics review board. and the study design was approved by the appropriate ethics review board.

**2. Description of the study variables**

Table 1 indicates that the trustworthiness variable is the most important for consumers’ acceptance of virtual influencers, with a mean of 4.954. This shows that trust between virtual influencers and consumers plays a highly important role until acceptance. The relevant content variable those virtual influencers provide to consumers has a mean of 4.851, which shows that the content provided by virtual influencers significantly enhances their degree of

**Table 1. Description of the study variables**

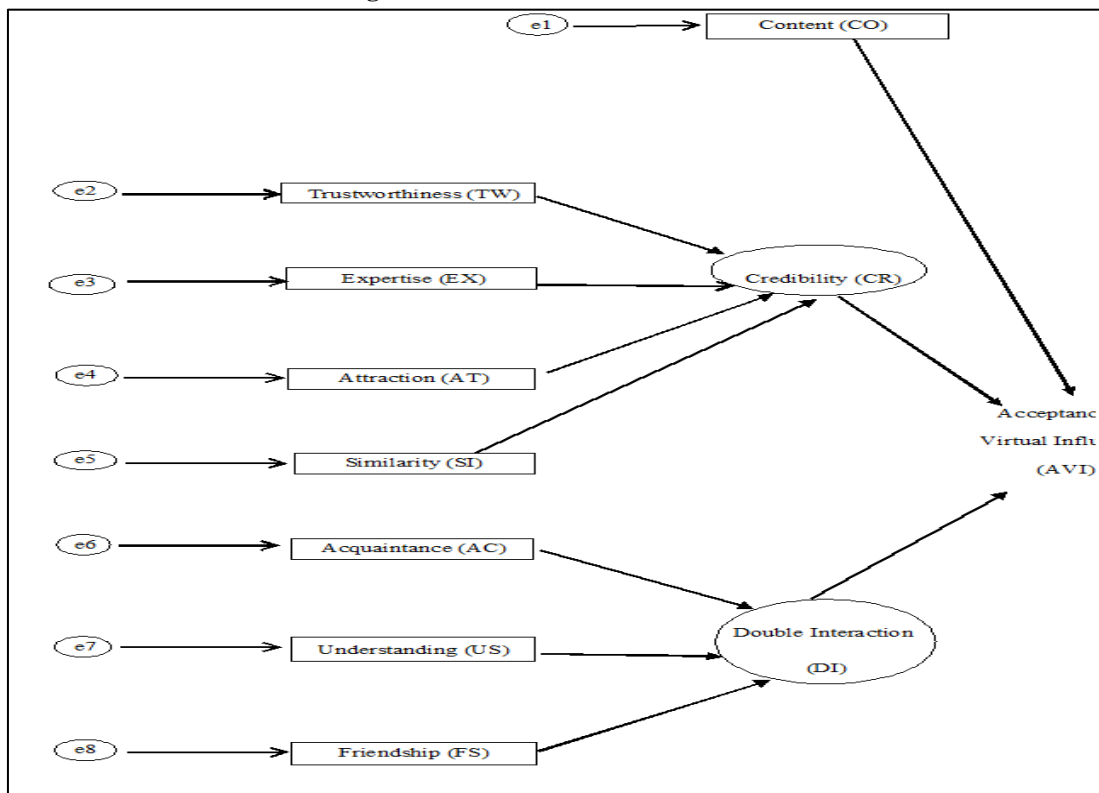
Hypothesis	M	SD
H1a	4.954	0.954
H1b	1.362	-0.681
H1c	3.983	0.812
H1d	4.269	0.919
H2a	3.728	0.853
H2b	3.705	0.806
H2c	3.647	0.841
H3	4.851	0.923

**3. Methodology**

The study relied on structural equation modeling (SEM) through the partial least squares method, using AMOS ver.25 programming. Use of SEM is commonly justified

because it helps identify latent variables that are believed to exist, but cannot be directly observed, as that all measurements and tests occur simultaneously in one statistical estimation procedure.as shown in Figure 2.

**Figure 2. Structural model estimation**



❖ **Results**

**1. Validity and reliability of the measuring instrument**

To verify the validity of the measuring instrument, a questionnaire was submitted to a number of arbitrators. To verify the reliability of the overall reliability instrument, the Alpha Cronbach analysis, which means acceptance of question statements that exceed 70%, was used. The results were as shown in Table 2.

**2. Test the study hypotheses**

To test the study hypotheses, SEM, using AMOS ver. 25 programming, was conducted. This is shown in Figure 2, and table 3, where shows the role that credibility, and its dimensions, (trustworthiness, similarity, and attractiveness with effect values of 0.732, 0.632, and 0.716, respectively), play in the acceptance of virtual influencers as digital promoters to raise brand awareness among Generation Z. Trustworthiness, similarity, and attractiveness were statistically significant in terms of their t-values, 5.131, 4.326, and 5.487, respectively, and coefficient of determination values 0.941, 0.853, and 0.934, respectively. That is, the following values of changes in the acceptance of virtual influencers as digital promoters to raise brand awareness among Generation Z, 0.901, 0.853, and 0.934, are due to the trustworthiness of virtual influencers, similarity between virtual influencers and customers, and attractiveness of virtual influencers, respectively. That means that H1a, H1c, and H1d are accepted.

As shown in Table 3, virtual influencers’ expertise does not affect their acceptance by customers as digital promoters. The effect value and the coefficient of determination were 0.214 each, which is not statistically

significant in terms of the t-value, which was 0.982. This means that H1b is rejected.

The data in Table 3 show that the effect value for the dimensions of double social interaction represented in acquaintance, friendship, and understanding reach 0.655, 0.642, and 0.597, respectively. Further, they are statistically significant in terms of t-values of 4.169, 4.012, and 3.396, respectively. Table 3 also indicates that the coefficient of the determination value of the acquaintance dimension is 0.769, which means that a 0.769 value of changes in the acceptance of virtual influencers as digital promoters to raise brand awareness among Generation Z is due to the acquaintance of virtual influencers with customers. Further, the coefficient of determination value of the friendship dimension and coefficient of determination value of the understanding dimension is 0.784 and 0.697, respectively. This indicates that 0.784 and 0.697 values of changes in the acceptance of virtual influencers as digital promoters to raise brand awareness among Generation Z is due to the friendship and understanding between virtual influencers and customers, respectively. That means that H2a, H2b, and H2c are accepted.

The data in Table 3 show that the relevant content influences the acceptance of virtual influencers as digital promoters to raise Generation Z’s brand awareness. The effect value is 0.724, which is statistically significant in terms of t-value of 5.178. The coefficient of determination value is 0.892, which means that a 0.892 change in the acceptance of virtual influencers as digital promoters to raise Generation Z’s brand awareness is due to the relevant content that virtual influencers provide to customers. Therefore, the third hypothesis is accepted.

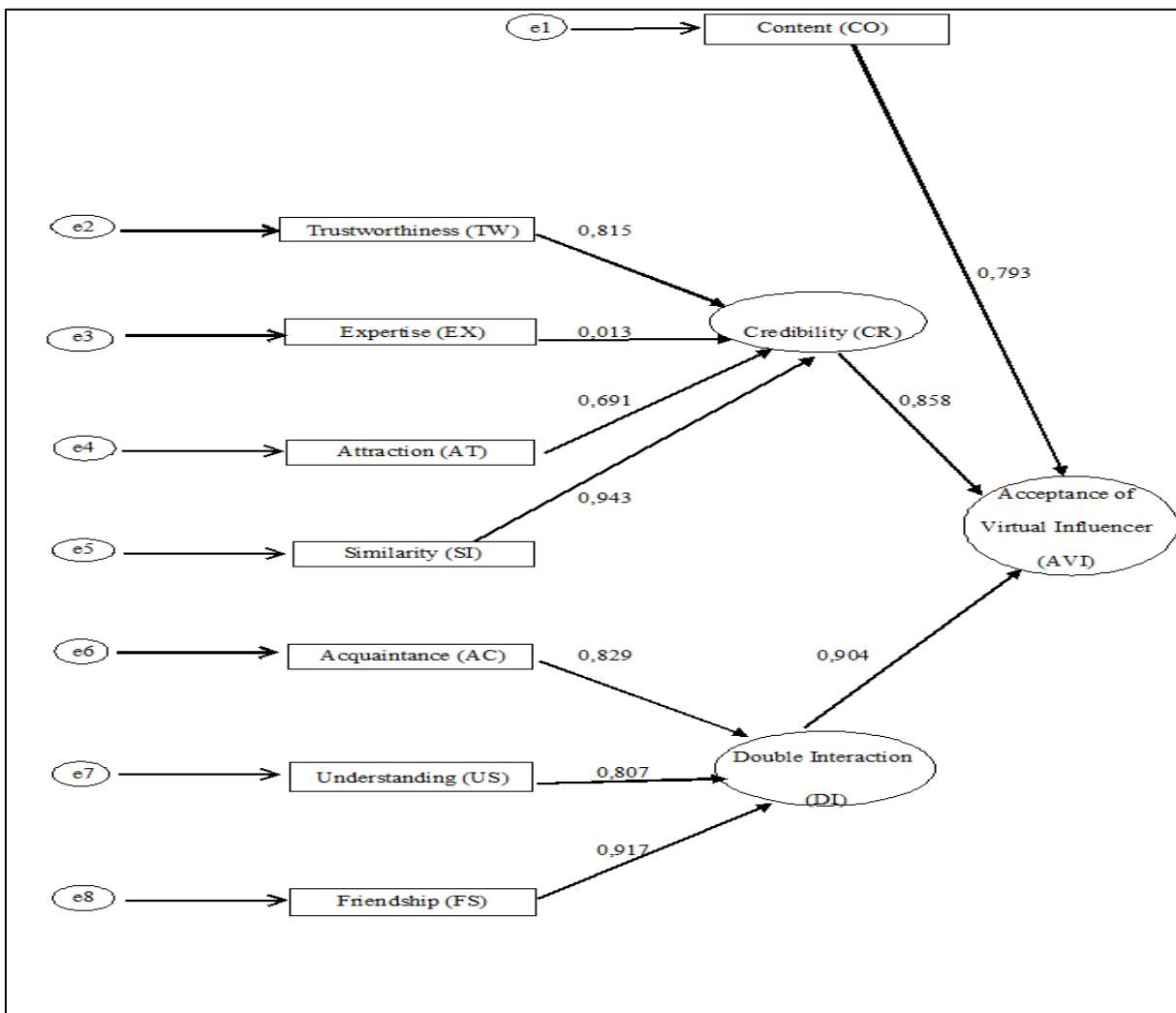
**Table 2. Cronbach's alpha analysis to test the measuring instrument reliability**

	<b>Focus of question</b>	<b># of paragraphs</b>	<b>Cronbach's alpha</b>
Credibility	Trustworthiness	10	92%
	Expertise	9	89%
	Similarity	12	94%
	Attractiveness	8	90%
Double interaction	Acquaintance	9	89%
	Friendship	10	87%
	Understanding	7	91%
	Relevant content	9	93%

**Table 3. Results of Hypotheses testing using the structural equation modeling**

Hypothesis	Effect Value Estimate	R <sup>2</sup>	p	t-statistics	Path	S. W	R.	Values Status
H1a	0.732	0.941	0.000	5.131	CR → TW	0,815		Acceptance
H1b	0.018	0.214	0.603	0.982	CR → EX	0,013		Rejection
H1c	0.632	0.853	0.002	4.326	CR → AT	0,691		Acceptance
H1d	0.716	0.904	0.000	5.487	CR → SI	0,943		Acceptance
H2a	0.655	0.769	0.004	4.169	DI → AC	0,829		Acceptance
H2b	0.642	0.784	0.001	4.012	DI → US	0,807		Acceptance
H2c	0.597	0.697	0.005	3.396	DI → FS	0,917		Acceptance
H3	0.724	0.892	0.000	5.178	AV → CO	0,793		Acceptance

**Figure 3. Result of structural model estimation**





## ❖ Discussion

The present study indicates that consumers are willing to accept virtual influencers if they have a set of dimensions that significantly affect their acceptance. Among the most important of these dimensions is the virtual influencers' credibility which mainly helps in accepting virtual influencers. This is consistent with (Influencer News 2020), which demonstrates the importance of digital influencers' credibility in general and that of virtual influencers, and that credibility has dimensions, namely, trustworthiness, similarity, and attractiveness, consistent with (Kim, Giroux, and Lee 2021, 1141:1145); however, it differs with this study on the dimension of expertise. Also the most important factor in virtual influencers' credibility is trustworthiness, consistent with (Robinson 2020, 2:5). Virtual influencers must be transparent to be perceived as trustworthy by consumers. Therefore, they must disclose their origin, as well as those who work in the background to contact consumers which increases their trust in the virtual influencers. They must conduct realistic activities such as those carried out by human influencers, and should be passionate, efficient, likable, loyal, honest, enthusiastic, professional, and informative when talking about the brand, and able to create a more worthy, interactive environment for the brand. With virtual influencers, all these things can be programmed. Moreover, digital influencers can specialize in one brand, which enhances these characteristics and thereby strengthens consumers' trust in them and their credibility.

The present study clarifies that virtual influencers' attractiveness is among the important factors that show their credibility. They have to have a knack for delivering content and convincing consumers of a brand. They should provide value to consumers, which can be programmed to present in a more attractive and persuasive manner. They must also have a degree of beauty that makes them acceptable to consumers. Advertising companies create virtual influencers to be acceptable to their target groups, which is a great advantage over human influencers.

Virtual influencers must be similar to consumers to convince them of a brand, which is consistent with (Schouten, Janssen, and Verspaget 2020, 277:280). Virtual influencers should be similar to their target groups in terms of age, demographics, demographic compatibility, interests, and tendencies. This similarity occurs more easily for virtual influencers than for human influencers. The results also indicate that virtual influencers should have the ability to have double social interaction with consumers on one side, and on the other side, with the team behind the virtual influencers. This is so that they can interact in a

perfect manner, as virtual influencers may be exposed to unprogrammed questions or situations, and if they respond irrelevantly, they will lose their trust and credibility. In this case, the person behind virtual influencers must give them relevant responses.

The study also shows that social interaction, live replies, and chats increase intimacy and linkage between virtual influencers and consumers. Virtual influencers have a great advantage, in terms of interaction that distinguishes them from human influencers, which is the ability to interact through chatting and direct responses throughout the day unlike human influencers who cannot do this throughout the day because of physical limitations.

The present study is also consistent with Kim, Giroux, and Lee (2021) in that understanding, friendship, and acquaintance are necessary for social interactions between virtual influencers and consumers to occur, where that virtual influencers have to cultivate friendship with consumers to gain familiarity and admiration, and thus have the necessary acceptance to interact with them, and they have to understand between virtual influencers and consumers, where consumers perceive a personal bond with the personalities of virtual influencers, through which virtual influencers can create motives to push consumers to become aware and convinced of the brand they are promoting. Understanding is among the common characteristics of virtual influencers and consumers. It is also important of having acquaintances, through which virtual influencers can identify the personality of consumers and then provide valuable content that is compatible with their habits, traditions, tendencies, personality, ideas, beliefs, and culture, and thus create interaction between them.

Further, the present study proves the importance of relevant content in influencing consumers, consistent with Nafees, Cook, and Stoddard (2020), Parisi (2021), and Schouten, Janssen, and Verspaget (2020). Acceptance of virtual influencers depends primarily on the content they provide, which must not be purely commercial but must be trustworthy and emotional. They must also provide interesting content that is compatible with the tendencies and characteristics of consumers through artificial intelligence techniques to attract them first and then continue to complete the follow-up. Virtual influencers in this factor have an advantage, as advertising companies can prepare and maintain content that is completely relevant to consumers unlike human influencers. Virtual influencers can also use the media that a company deems relevant to promote a product because the team behind them is knowledgeable about marketing effectively unlike for human influencers. Advertising companies can also alter

the provided content easily and without any objection from virtual influencers.

## ❖ Conclusions

### 1. Theoretical Contributions

The present study addresses the topic of virtual influencers, an important marketing topic considering the spread of digitization and the virtual transformation of many businesses, most importantly in marketing. The study has indicated that, in the next few years, virtual influencers may be the common type of influencers on the Internet, as they have several advantages over human digital influencers, and thus companies prefer them highly. The study also showed that accepting the virtual influencer as a digital promoter requires that the virtual influencer must have credibility, which is formed through the eligibility of the virtual influencer with the confidence of consumers and through its similarity with consumers, not only physical similarity, but also emotional similarity, and this credibility is formed through the availability of attractiveness factors for the virtual influencer.

Also, one of the most important dimensions of accepting the virtual influencer is the dual interaction, which can take place through the knowledge he has acquired, his ability to form friendship with consumers, and his ability to understand them properly, with which he can approach them.

The study also concluded that the content provided by the virtual influencer, which is relevant to consumers, represents a strong dimension in its acceptance, as it is necessary that the content provided by the virtual influencer addresses consumers in a way that enables the consumer to trust in the virtual influencer and what he offers, and the content presented must also resemble consumers in Their characteristics and temperament through which the virtual influencer can make friends with consumers.

### 2. Practical contributions

The current study presents the dimensions of the virtual influence that officials in digital organizations can benefit from, as they have to create a virtual influencer characterized by these dimensions. The study concluded that the virtual influencer indicates that these dimensions are the virtual influencer's

credibility by being worthy of consumers' trust and able to attract them to deal with him, which is achieved through his similarity with them. Moreover, the acceptance of the virtual influencer depends on providing it with relevant content and appropriate to the category offered to it, and the ability to interact with them through acquaintance to know the personality of customers and understanding with them and enhance it by forming friendships with customers.

### 3. Limitations of the study

The study focused on the topic of virtual influencers only, not influencers in general. It was also limited to addressing three dimensions of accepting virtual influencers as digital promoters to raise Generation Z's brand awareness, as there may be more dimensions that can be examined in future research.

The study was also limited to examining how much Generation Z can accept virtual influencers as digital promoters to raise brand awareness, as this generation is most closely related to digital influencers in general, and future research can examine the other generations, such as Generation X and Y.

The effect of using virtual influencers on promoting brands and its effect on increasing sales and profits can also be studied. Future studies can explore the obstacles that prevent many clients from being convinced of virtual influencers and how to overcome this; future studies can also make comparisons between the societies that accepted the virtual influencer and those that did not, and how to benefit from the societies that accepted it. Social, cultural, and psychological factors that affect the acceptance of the default influencer can be further explored.

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