Gen Z travellers in Instagram marketplace:

Trust, influencer type, post type and purchase intention

Abstract

Despite the growing role of virtual influencers in the tourism and hospitality business, there is a lack of research on Gen Z travellers' trust in Instagram marketplace and virtual influencers. Thus, this study applied trust transfer theory to explore how Gen Z travellers' trust in Instagram marketplace ias transferred to trust in tour programme sellers and purchase intentions. In addition, it examined influencer type (human vs. virtual) and post type (sponsored vs. non-sponsored) as potential moderators of this relationship. A mixed methods approach was adopted that comprised in-depth interviews with Gen Z travellers (Study 1) and three between-subjects experiments (Studies 2–4). Key findings revealed that the interaction effect of high (vs. low) trust in Instagram marketplace and sponsored (vs. non-sponsored) posts resulted in higher trust in sellers when a virtual influencer was deployed than when a human influencer was deployed. In addition, trust in sellers was found to play a significant mediating role in the relationship between Gen Z travellers' trust in Instagram marketplace and purchase intentions. These findings are pioneering insights into the effects of virtual influencers on Instagram from a marketing perspective.

Highlights

- This study explores how Gen Z travellers' trust in Instagram marketplace is transferred to trust in tour programme sellers and purchase intentions.
- The moderator (post type: sponsored vs. non-sponsored) was significant.
- The moderator (influencer type: human vs. virtual) was also significant.

Introduction

The increased number of virtual influencers in business has transformed the ways products are promoted and the visibility of brand images on the Internet, with major impacts on consumers (Sands et al., 2022). Virtual influencers are computer-generated imaginary characters that use motion capture technology to imitate human influencers (Ahn et al., 2022; Sands et al., 2022). The number of virtual influencers has increased substantially from 9 in 2015 to over 200 in 2022 worldwide and creators continue to find new ways to expand and reinvent their potential uses (Hiort, 2022). The field of entry for virtual influencers is limitless and covers all industries from fashion to travel. In particular, the tourism and hospitality industry has embraced virtual influencers. For example, SNSs of the Korea Tourism Organisation have utilised the first virtual influencer, 'Lizzie Yeo', as an ambassador for Korean tourism to open up new global markets and attract visitors to Korea (Korea Tourism Organisation [KTO], 2022; Yim, 2022). Lizzie Yeo takes her Instagram visitors on a virtual journey to Korea (KTO, 2022). In addition, the Malta Tourism Authority (Visit Malta) has launched its first virtual citizen, 'Marija', to promote Malta's rich history and tourism attractions online both in SNSs and on its official website (Pfalz, 2022).

Marketers have observed that generation Z (hereafter referred to as 'Gen Z') form closer para-social interactions with virtual influencers than other generations (Moustakas et al., 2020; Sands et al., 2022). Gen Z were born between 1995 and 2010; therefore, they are not only proficient in using IT devices but are also skilled in evading censorship to access media on their mobile devices and establishing borderless relationships using SNS (Sakdiyakorn et al., 2021). As a result, 'digital natives' have been emerging among Gen Z as a new cohort of consumers with a strong influence in SNS distribution channels, particularly Instagram (Choi et al., 2022).

As a consequence, business enterprises across various industries are using virtual influencers to publicise their brands and attract Gen Z on SNS (Moustakas et al., 2020). For example, Lil Miquela had approximately 3 million Instagram followers as of October 2022. Lil Miquela actively collaborates with several fashion brands (e.g., Calvin Klein, Gucci and Chanel) and tech brands (e.g., Samsung) as a virtual influencer. Gen Z are fascinated by the way Lil Miquela looks, speaks, behaves, and interacts, which ensures the success of the marketing initiatives that she is involved with (Ahn et al., 2022; Moustakas et al., 2020). Lil Miquela is expected to earn nearly USD$1 million in 2022 (Steele, 2022). Gen Z travellers build deep empathy with virtual influencers because they perceive them as being human (Steele, 2022). Hence, virtual influencers have become representative entities for brands and tourism products, and they blur the boundary between the real world and the virtual world (Ahn et al., 2022).

In response to the demand in industry for virtual influencers, scholars have shown increasing interest in the phenomenon. While research on virtual influencers is in its infancy, several scholars have discussed the prospective opportunities and challenges associated with them (Miyake, 2022; Moustakas et al., 2020; Robinson, 2020; Sands et al., 2022). Another major research focus is to examine the visual appeal of virtual influencers to consumers, such as

how to avoid the uncanny valley effect by manipulating their appearance (Ahn et al., 2022; Liu & Lee, 2022). However, researchers in the tourism and business literature have overlooked the underlying trust mechanism that Gen Z travellers associate with virtual influencers on SNS marketplaces, such as Instagram marketplace.

Founded in 2020, the Instagram marketplace has rapidly become one of the most popular SNS marketplaces, because it offers a wide variety of products (Campbell, 2022). When Gen Z travellers plan their holidays, they often seek unique tourism products on Instagram marketplace (e.g., half-day Italian cooking classes with locals). From a marketing perspective, more than 15 million sponsored posts are posted on Instagram marketplace annually and Instagram influencers earn a total of USD$2.3 billion per year (Campbell, 2022). In these newly established online shopping platforms, trust in the platform itself serves as a safeguard for consumers to offset the perceived risks towards online sellers (Chen et al., 2015). In a similar vein, Gen Z travellers' trust in Instagram marketplace can be transferred to their trust in Instagram-based tour programme sellers (hereafter referred to as 'trust in sellers'), as postulated by trust transfer theory. Therefore, trust in Instagram marketplace plays an essential role in building credibility among Gen Z travellers in addition to their trust in sellers.

Previous research has found that influencers' sponsored posts on Instagram negatively affect user attitudes and behaviour by undermining trust (Boerman et al., 2017; Hudders et al., 2022; Martínez-López et al., 2020; Singh et al., 2020). In contrast, an increasing number of recent studies claim that users form trust in influencers and even their sponsored posts because of their underpinning admiration and idolisation of the influencers (Jin et al., 2021; Kim et al., 2021). These arguments are contradictory and require further investigation. It is also unclear how virtual influencers' sponsored posts stimulate trust and purchase intentions on SNS marketplaces. That is, there have been no attempts to investigate the impacts of Gen Z travellers' trust in the Instagram marketplace on their purchase intentions, mediated by trust in the Instagram-based tour programme sellers. Furthermore, tourism scholars have not examined the moderating roles of influencers' posts (sponsored vs. non-sponsored) and influencer type (human vs. virtual) in the proposed relationship.

Considering the substantial role of virtual influencers in social media marketing, it is academically imperative to investigate the trust mechanism between Gen Z travellers and tour programme sellers on Instagram marketplace in a timely manner. Thus, research questions (RQs) are developed as follows: RQ1: What do Gen Z travellers think of Instagram marketplace and influencers? RQ2: What is the effect of Gen Z travellers' trust in the Instagram marketplace (high vs. low) on trust in the sellers and purchase intentions? RQ3: How do influencers' posts (sponsored vs. non-sponsored) moderate the relationship between the effect of Gen Z travellers' trust in the Instagram marketplace on trust in the sellers? and RQ4: How does influencer type (human vs. virtual) moderate the relationship between the effect of Gen Z travellers' trust in the Instagram marketplace and influencers' posts on trust in the sellers?

To answer RQs, this study adopted trust transfer theory. The main purpose of this study is fourfold: (1) to explore Gen Z travellers' perceptions of Instagram marketplace and

influencers; (2) to examine the effect of Gen Z travellers trust in the Instagram marketplace on their purchase intentions mediated by trust in the sellers; (3) to examine the effect of Gen Z travellers' trust (high vs. low) in the Instagram marketplace on trust in the sellers; and (4) to examine the role of two moderators (post type and influencer type) in the effect of Gen Z travellers' trust in the Instagram marketplace on trust in the sellers and their purchase intentions. As shown in Figures 1 and 2, an in-depth interview and three sequential experiments are conducted.
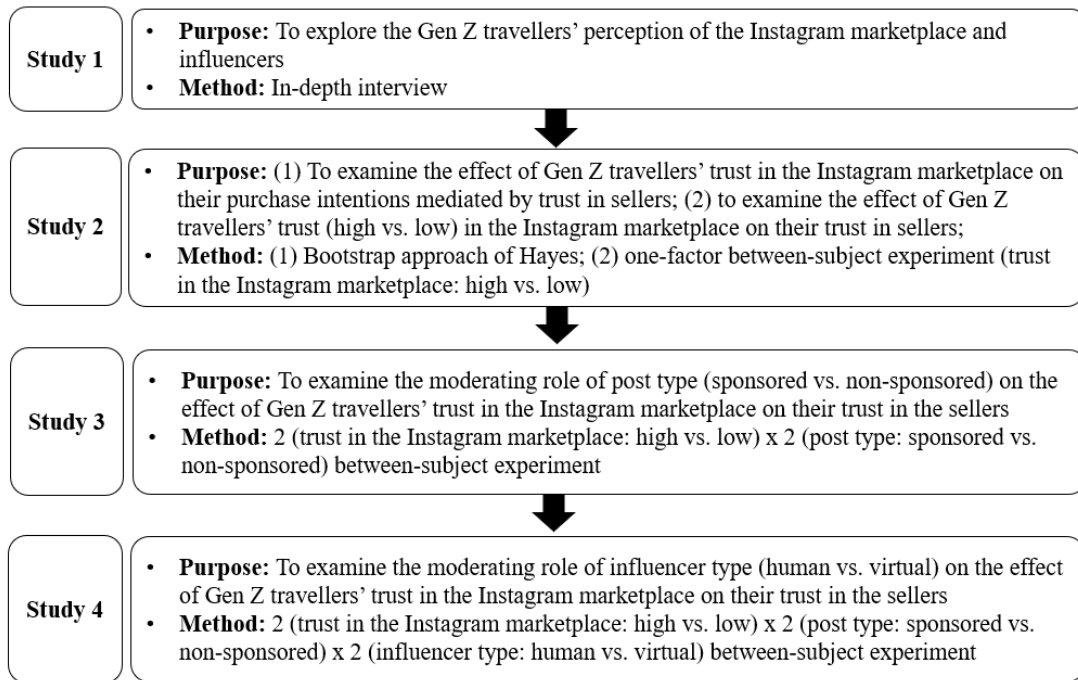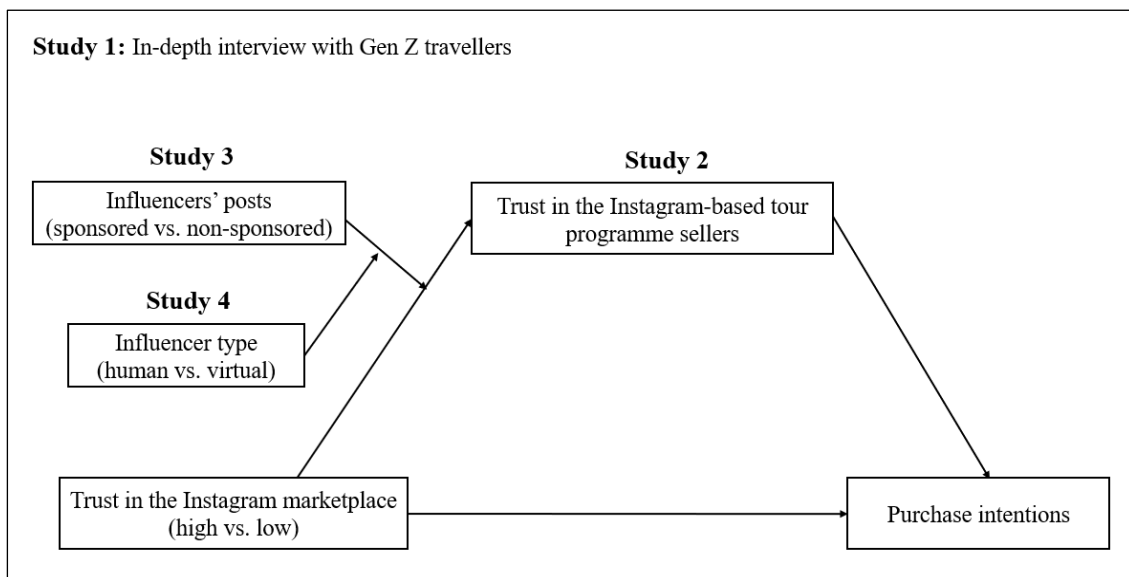
Figure 1. Study procedure

Study 1
- **Purpose:** To explore the Gen Z travellers' perception of the Instagram marketplace and influencers
- **Method:** In-depth interview

Study 2
- **Purpose:** (1) To examine the effect of Gen Z travellers' trust in the Instagram marketplace on their purchase intentions mediated by trust in sellers; (2) to examine the effect of Gen Z travellers' trust (high vs. low) in the Instagram marketplace on their trust in sellers;
- **Method:** (1) Bootstrap approach of Hayes; (2) one-factor between-subject experiment (trust in the Instagram marketplace: high vs. low)

Study 3
- **Purpose:** To examine the moderating role of post type (sponsored vs. non-sponsored) on the effect of Gen Z travellers' trust in the Instagram marketplace on their trust in the sellers
- **Method:** 2 (trust in the Instagram marketplace: high vs. low) x 2 (post type: sponsored vs. non-sponsored) between-subject experiment

Study 4
- **Purpose:** To examine the moderating role of influencer type (human vs. virtual) on the effect of Gen Z travellers' trust in the Instagram marketplace on their trust in the sellers
- **Method:** 2 (trust in the Instagram marketplace: high vs. low) x 2 (post type: sponsored vs. non-sponsored) x 2 (influencer type: human vs. virtual) between-subject experiment

Figure 2. Research model

Study 1: In-depth interview with Gen Z travellers

Study 3
Influencers' posts
(sponsored vs. non-sponsored)

Study 4
Influencer type
(human vs. virtual)

Study 2
Trust in the Instagram-based tour
programme sellers

Trust in the Instagram marketplace
(high vs. low)

Purchase intentions

Supplement Appendix A (refer to the online supplement) shows definitions of variables used in the study. The findings broaden the tourism literature by providing an in-depth exploration of Gen Z travellers' trust in Instagram marketplace from a marketing perspective. Tourism stakeholders will also benefit from our findings by hiring virtual influencers on SNS when launching their marketing campaigns.

2. Literature Review

2.1. Overview of shopping on SNS marketplaces

People are increasingly shopping on SNS marketplaces where various content, photos, and merchandise can be shared on their respective marketplaces. A SNS marketplace is a type of social commerce site that is similar to mobile shopping experiences in existing distribution channels, however, the shopping function is combined with SNS in these marketplaces (Djafarova & Bowes, 2021). For example, Instagram marketplace (also known as 'Instagram shopping') is a commercial platform using the social networks that users form on Instagram. In particular, Instagram marketplace comprises "a set of features that allow people to easily shop your brand's photos and videos all across Instagram" (Meta, n.d.). This is different from clicking on a link on the company's official Instagram account, which leads to their online shopping mall. The SNS marketplaces have the advantage of being able to promptly exploit users' reactions to products and services, especially when sellers' posts on Instagram's feed go viral (Djafarova & Bowes, 2021; Hyun et al., 2022). Prospective sellers can easily create shopping malls and manage their products and sales using the membership provided on SNS marketplaces. SNS marketplace provides campaign functions as a marketing tool to facilitate promotional activities and allow virtual shop owners to communicate with their customers (Hyun et al., 2022).

The three factors of 'convenience', 'economic feasibility', and 'unique products' stimulate users' engagement in shopping on SNS marketplaces (Hyun et al., 2022; Kang & Johnson, 2013). Convenience is one of the main factors influencing users' selection of online distribution channels because it reduces the non-monetary costs related to the time and effort required for users to purchase products or services (Hyun et al., 2022). As in mobile shopping, users can shop for products in SNS marketplaces without any spatio-temporal constraints. In addition, it is easy to search for and compare products through hashtags and customised recommendations (Kang & Johnson, 2013). In addition, sellers supply products directly to the users, which minimises the intermediate costs incurred in the distribution process. Therefore, users can purchase products at relatively lower prices from SNS marketplaces (Djafarova & Bowes, 2021). In this way, SNS marketplaces provide economic benefits to users through affordable prices and sellers' financial promotions.

2.2. Trust in the SNS marketplaces and trust transfer theory

Tourism scholars have identified antecedents of trust in the online environment, including online shopping (Dickinger, 2011; Gregori et al., 2014; Kim et al., 2013). Considering that online shopping is inevitably associated with the consumer's perceived risk, the antecedents

of trust closely reflected the provider's integrity, benevolence, competence, and ability (Escobar-Rodríguez et al., 2017; Gregori et al., 2014). In addition, product was identified as a key antecedent (Escobar-Rodríguez et al., 2017; Gregori et al., 2014). That is, users can access a broad selection of unique and even handmade products on SNS marketplaces. For example, Choi et al. (2022) found that Gen Z prefer to own unique or customised products (e.g., customised Converse shoes, smartphone cases), which are provided by small and medium sized enterprises (SMEs) and local designers on SNS marketplaces. The stimulation of Gen Z' expectations by fulfilling their needs has become one of the main strategies for promoting sales on SNS marketplaces (Choi et al., 2022).

Compared with online shopping malls operated by multinational enterprises (MNEs), however, individuals shopping in SNS marketplaces inevitably take high risks with the overall product quality, sellers' integrity and competency, transaction security, and customer service. The uncertainties and risks in SNS marketplaces are higher than in other traditional distribution channels because of the nature of the business management system (Djafarova & Bowes, 2021). In addition, these risks substantially weaken trust in sellers from the users' perspective. Therefore, trust in the SNS marketplace itself is critical.

Meanwhile, the trust transfer theory explains that "trust can be transferred from the selling platform to the sellers and has been widely applied in the e-commerce environment" (Chen et al., 2015, p. 261). Similarly, Liu et al. (2018) observed that "an individual's trust can be transferred from a trusted source to an unknown target if there is a specific association between them" (p. 1). This implies that trust towards individual sellers on SNS marketplace can be transferred from the SNS marketplace itself. Chen et al. (2015) found that trust in platform positively affects users' purchase intentions, which are mediated by their trust in sellers. Users form trust in SNS marketplaces that maintain their high corporate reputation; therefore, they come to consider the SNS marketplaces as trustworthy places for transactions and shopping (Chen et al., 2015). Users are satisfied and show trust towards sellers when they perceive that the reputation of the related SNS marketplace is trustworthy. Similarly, Hong and Cho (2011) confirmed that the impact of trust in Internet platforms leads to trust in sellers and ultimately leads to increasing purchase intentions.

Tourism scholars have also shown how tourists' trust in the Airbnb platform leads to continuance intention based on trust transfer theory. Yang et al. (2019) found that perceived Airbnb site risk reduced trust in Airbnb, whereas perceived Airbnb site quality and reputation increased trust in Airbnb. Furthermore, their findings indicated the effects of tourists' trust in Airbnb on continuance intention mediated by trust in Airbnb hosts. In other words, trust in Airbnb is successfully transferred to trust in Airbnb hosts. Similarly, Wang et al. (2020) revealed that social antecedents and technical antecedents led to tourists' trust in Airbnb. They then verified the effects of trust in Airbnb on continuance intention based on trust transfer theory. According to the trust transfer theory and the results of empirical studies, the following hypothesis is developed:

H1. Gen Z travellers' trust in the sellers mediates the impact of trust in the Instagram marketplace on their purchase intentions.

2.2. Moderating role of post type (sponsored vs. non-sponsored)

Influencers disclose sponsorship by indicating their financial support in a post/hashtag, such as receiving products or service sponsorship from a company or receiving a predetermined fee (Kim et al., 2021). The act of disclosing sponsorship on SNS is also called rewarded referral (Jin et al., 2021). The persuasion knowledge model explains that if receivers doubt the motives or intentions behind the SNS sender's actions, the sender's persuasiveness and truthfulness will be undermined compared with when the receivers do not doubt the sender's motives (Hudders et al., 2022). That is, when users perceive that an influencer's product recommendation is compensated by companies, the users suspect that the influencer's intentions are not genuine and reduce their purchase intentions. This suspicion of influencer subterfuge eventually leads to negative attitudes toward the recommended product and lost purchase intentions (Boerman et al., 2017; Hudders et al., 2022).

Scholars have pointed out that when influencers disclose economic compensation from companies for the promotion of their products or services on posts, the more users perceive that influencers benefit economically, the lower the marketing effect because of the users' decreased trust towards the influencers and companies (Boerman et al., 2017; Hudders et al., 2022; Singh et al., 2020). More specifically, sponsored posts negatively affect trust in influencers when the influencers and companies fail to maintain their integrity and reputation (Martínez-López et al., 2020). Similarly, Liao et al. (2021) found that the consequences of sponsorship disclosure are related to trust in the entity (e.g., SNS and influencers) that discloses the related economic benefits. That is, trust in SNS marketplace where influencers disclose sponsorship is negatively related to trust in sellers. In contrast to the conventional stance, recent studies have argued that influencers' sponsorship disclosure does not always lead to distrust towards influencers and sellers (Jin et al., 2021; Kim et al., 2021; Xie & Feng, 2023). Kim et al. (2021) found that advertising awareness was increased when influencers disclosed their sponsorship. Similarly, Jin et al. (2021) argued that trust may still be maintained in the para-social interaction between influencers and users because of the users' admiration and idolisation of the influencers. These arguments are contradictory and require further investigation. Thus, we synthesised the empirical studies reflecting the dominant conventional stance on sponsorship disclosure to develop the following hypotheses:

H2. There is a two-way interaction effect of Gen Z travellers' trust in the Instagram marketplace (low vs. high) and influencers' posts (sponsored vs. non-sponsored) on trust in the sellers.

H2-1. Influencers' non-sponsored posts (vs. sponsored) positively affect Gen Z travellers' trust in the sellers when their trust in the Instagram marketplace is high (vs. low).

H2-2. Influencers' sponsored posts (vs. non-sponsored) negatively affect Gen Z travellers' trust in the sellers when their trust in the Instagram marketplace is low (vs. high).

2.3. Moderating role of influencer type (human vs. virtual)

Marketers have given substantial attention to influencer marketing because of its effectiveness. Influencers are the primary endorsers of products or services on SNS (Kim et al., 2021; Xie & Feng, 2023). Influencers who enjoy public recognition often enter into agreements and legal contracts with organisations to promote their brands. In this context, influencers act as the source of information in the advertising area within SNS content. In addition, the source of information guarantees the quality of the product in the form of the sponsorship received by the influencers (Martínez-López et al., 2020). However, scholars note that the sponsorship disclosure by influencers has a negative effect on users' attitudes and trust toward products because these users often form a sceptical attitude toward a sponsored post when they become aware that influencers are promoting a brand for financial benefit (Kim & Kim, 2021; Liao et al., 2021). Therefore, concerns are growing among marketers about how to disclose sponsorship strategically (Xie & Feng, 2023).

Meanwhile, 3D computer graphics and motion capture technologies are being used to create virtual influencers who are now exerting enormous influence on SNS (Liao et al., 2021). These virtual influencers are engaged in advertising campaigns by brands that sponsor them on SNS. Their innovative and fresh images signal to Gen Z that they can be trusted. Gen Z follow these virtual influencers because they are trend-conscious and open-minded in representing the promoted brands (Sands et al., 2022). Gen Z are impressed by the virtual influencers' looks, speech, and behaviour, and tend to build para-social relationships based on their underlying admiration and idolisation (Ahn et al., 2022). Through their interactions with the virtual influencer, Gen Z build trust, which enhances the virtual influencers' authenticity. These characteristics make the virtual influencer an effective marketing tool for brands and organisations (Moustakas et al., 2020). Hence, the activities of virtual influencers are increasingly expanding beyond SNS to on-site events, TV commercials, and online broadcasting (Ahn et al., 2022).

Virtual influencers are not without criticism. For example, Sands et al. (2022) claimed that they were false idols, which illustrates the growing concerns about them in the literature. However, Gen Z may be less critical about the sponsored posts uploaded by virtual influencers than human influencers because of the nature of their identity (i.e., virtual influencers are not real people and cannot profit directly from sponsorship). Ahn et al. (2022) contended that Gen Z tend to participate more actively in their communications with virtual influencers compared with human influencers, which shows that virtual influencers have a great impact as influencers. The attractiveness of the virtual influencers' flawless appearance (e.g., perfect body shape and clear complexion) significantly appeals to Gen Z' decision-making process, trust, and behavioural intentions (Ahn et al., 2022). Hence, virtual influencers are considered a powerful marketing tool that can be used to target Gen Z in particular and overcome the limitations of human influencers in the future (Sands et al., 2022; Xie & Feng, 2023). Thus, the following hypotheses are developed:

H3. There is a three-way interaction effect of Gen Z travellers' trust in Instagram marketplace (low vs. high), influencers' post (sponsored vs. non-sponsored), and influencer type (human vs. virtual) on trust in sellers.

H3-1. When a human influencer is deployed, the interaction effect of high (vs. low) trust in Instagram and non-sponsored (vs. sponsored) posts results in higher trust in sellers.

H3-2. When a virtual influencer is deployed, the interaction effect of high (vs. low) trust in Instagram and sponsored (vs. non-sponsored) posts results in higher trust in sellers.

3. Methods and Results

3.1. Study 1

In-depth interviews with Gen Z were conducted to explore their perceptions of the Instagram marketplace and influencers. Considering the limited volume of research on Gen Z and the Instagram marketplace, these interviews provided a foundation for strengthening the proposed research model, which was examined through a series of online experiments (Studies 2–4).

3.1.1. Methods

A combination of purposive and snowball sampling was adopted for participant recruitment. Two criteria were set for participants: (a) UK residents aged 18 to 25 (minors were excluded); (b) UK residents who purchased products via the Instagram marketplace within 6 months. Fifteen participants (labelled A through O) consisting of seven men and eight women who met both criteria were invited for in-depth interviews. After obtaining ethical approval including risk assessment from a leading author's institution, face-to-face interviews took place in the UK in March 2022. The participants were informed that the words 'Instagram marketplace', also called 'Instagram shopping', refers to the SNS marketplace that allows sellers to offer their products for purchase directly through Instagram. That is, shopping in the 'Instagram marketplace' does not include shopping in the 'online shopping malls' to which users are redirected from the Instagram business account.

Interview questions included the following: (a) What is your overall perception of the Instagram marketplace compared with conventional online shopping malls? (b) What is your major motivation to shop in the Instagram marketplace? and (c) What do you think of the impact of influencers on your consumption? Each session lasted approximately 30–60 minutes and was recorded with the participants' consent. The data were manually analysed by two researchers, due to the suggestion of All et al. (2016) that 20 participants is the absolute minimum sample size for running NVivo. To ensure objectivity, the two researchers adopted procedures suggested by Qu and Dumay (2011), independently analysing the data using thematic analysis and then comparing the extracted themes to confirm the final choices.

3.1.2. Results

Unique products and trustworthy sellers

All of the participants mentioned that the Instagram marketplace provides a range of 'unique' and 'customised' products distinct from conventional branded products. Compared with branded products, local sellers at SMEs offer 'unique' and 'customised' but still 'reliable' products appealing to Gen Z. In terms of tourism, the participants showed high interest in unique tour programmes such as cooking classes and winery tours offered by local residents. Compared with other generations, participants were willing to spend more money on unique tour experiences at their destinations. They were convinced that these experiences provided value for money. Most of the participants also shared their travel experiences on SNS while travelling, because sharing was a part of their travel journey.

Although most SME sellers are local and independent, the participants showed a high level of trust in these sellers in the Instagram marketplace. Several participants believed that if they needed help such as for a refund or fraud, Instagram would do its best to resolve these issues. That is, their trust was transferred from the selling platform to the sellers, consistent with trust transfer theory (Chen et al., 2015). Finally, the participants believed that their consumption eventually contributed to the local tourism economy, thus benefiting the tourism community. They mentioned that consuming products from SMEs made them feel like responsible consumers. Thus, our first theme was aligned with previous research on Gen Z: this group seeks 'uniqueness' when shopping (Choi et al., 2022; Hyun et al., 2022), is actively engaged with responsible consumption by supporting SMEs.

Powerful influencers

All of the participants agreed that influencers substantially affect their purchase intentions and attitudes towards products and services. For example, when influencers shared their experiences about eco-friendly hotels and promoted a hotel's sustainability policy, they were convinced of sustainable policy. It is postulated that Gen Z travellers are highly engaged with sustainability (Salinero et al., 2022). However, their opinions on sponsored posts uploaded by influencers differed somewhat. Most of the participants expressed a lack of trust in sponsored posts, leading to negative purchase intention, consistent with previous studies on sponsored posts and consumer behaviour (Boerman et al., 2017; Hudders et al., 2022; Liao et al., 2021). In contrast, some of the participants supported the influencers they followed, showing positive purchase intention regardless of sponsorship disclosure because of their belief that influencers also consider their reputation when creating sponsored posts. Interestingly, a few participants even mentioned the growing role of virtual influencers such as 'Lil Miquela' who often act as commercial models. For example, one participant said the following:

> "It is not something new for influencers to upload sponsored posts. Well… we all know
> that it is prevalent, and I am generally reluctant to click on sponsored posts to obtain
> further information. It is questionable how much influencers received in return for this
> posting, and of course, the credibility of the seller of the product also decreases. Virtual

influencers may be more trustworthy than influencers because at least money is meaningless to them. I personally think virtual influencers are as powerful as influencers to young people like me (Participant B)".

Convenience

Given Instagram's popularity, the participants found it very easy to navigate the Instagram marketplace for shopping purposes. Most of the participants used the term 'convenient' or 'convenience' when describing the Instagram marketplace, which aligned with their motivation to use it. Studies have articulated that Gen Z prefer to use Instagram due to its high convenience and accessibility compared with other social media platforms (Sakdiyakorn et al., 2021). Thus, the choice of Instagram as social media provides an incentive for Gen Z to engage in shopping.

3.1.3. Implications for follow-up studies

Consistent with previous studies, the findings of Study 1 revealed that Gen Z were highly engaged with the Instagram marketplace for shopping purposes. Gen Z perceived the Instagram marketplace as a unique, convenient, and reliable platform, and acknowledged the substantial role of influencers. Study 1 provided a foundation for the proposed research model based on trust transfer theory. However, mixed views exist about the effect of influencer posts (sponsored vs. non-sponsored) on trust and purchase intentions. Furthermore, given the growing popularity of virtual influencers among Gen Z, the participants were asked about the effects of posts by influencer type (human vs. virtual) on their trust in the sellers and their purchase intention. More importantly, most of the participants purchased tangible products such as mobile phone cases and clothes from the Instagram marketplace. The literature remains unclear as to how much Gen Z travellers trust sellers who provide tourism products such as a half-day guided walking tour led by locals. Therefore, Studies 2–4 were conducted to examine the interaction effects of Gen Z travellers' trust in Instagram marketplace, influencer posts, and influencer type on trust in sellers and purchase intentions.

3.2. Study 2: Mediating role of trust in sellers

Study 2 examined the following: 1) the effect of trust in Instagram marketplace (high vs. low) on purchase intentions; and 2) the mediating role of trust in sellers by testing H1.

3.2.1. Methods

A one-factor between-subjects experiment was conducted by manipulating two levels of trust in Instagram marketplace: High trust in the Instagram marketplace (hereafter referred to as 'high condition') and low trust in Instagram marketplace (hereafter referred to as 'low condition'). Stimuli were created by highlighting three key features in forming trust, including integrity, competence, and transaction security (see Supplement Appendix B in the online materials.). The results of a pilot test with 25 master's students confirmed that the stimuli for different levels of trust were correctly recognised.

The criteria for selecting the participants, including age and previous shopping experience in the Instagram marketplace, were consistently applied to a series of studies (Studies 1–4). A reliable and widely used software called G*Power (Liu et al., 2022) was used to determine an appropriate sample size for Studies 2–4. A power test with a medium effect size (0.25), an α error probability of 0.05, and 95% power suggested that 122 samples were the minimum needed to examine the effect of trust in Instagram marketplace on trust in sellers. In May 2022, 350 questionnaires were collected through Prolific, an online panel platform. Considering its strict and specific screening procedures to recruit prospective participants, Prolific ensures high data quality (Kapoor et al., 2022). The participants were randomly assigned to one of two conditions (C1: high trust; C2: low trust).

To further ensure data quality, two attention checks were included in the questionnaire. 'According to the scenario, which destination are you planning to visit? (a) New York, (b) Tokyo, (c) Florence, or (d) Beijing'; 'According to the scenario, which platform are you browsing? (a) Booking.com, (b) Instagram marketplace, (c) Jet2.com, or (d) Skyscanner'. After data screening and attention checks, 332 usable questionnaires were available for data analysis. As shown in Supplement Table 1 (refer to the online supplement), the participants were distributed normally, indicating that men accounted for 44.9% of the sample while women accounted for 55.1%. Regarding their marital status, 84.3% of the participants indicated that they were single.

During data collection, all of the participants were instructed to imagine that they were planning to travel to Florence, Italy with friends in the coming summer. It would not be a package tour. Given that they were going to explore the Tuscany area, they would be browsing posts in the Instagram marketplace for a one-day (or half-day) tour programme. Local Instagram-based sellers provide a range of affordable historical and cultural programmes, such as pasta-making classes, winery tours, and historical walking tours with locals. The participants in each condition were then instructed to read the stimuli (see the Supplement Appendix B in the online materials) and complete the questionnaire.

Manipulation was measured by one item on a scale of 1 to 7: 'Based on the article in The Guardian, I am certain that the Instagram marketplace is trustworthy.' (1 = very uncertain, 7 = very certain). Five items from Choi et al. (2016) were modified and adopted to measure trust in sellers: 'I believe that Instagram-based tour programme sellers have high integrity'; 'Instagram-based tour programme sellers are honest when dealing with customers'; 'Instagram-based tour programme sellers offer better products than others'; 'I trust Instagram-based tour programme sellers'; and 'I believe that Instagram-based tour programme sellers are reliable'. Responses were measured on a scale from 1 to 7 (1 = strongly disagree, 7 = strongly agree, α: .732).

In addition, three items from McClure and Seock (2020) were modified and adopted to measure purchase intentions: 'I am willing to purchase tour programme(s) in the Instagram marketplace'; 'I am likely to purchase tour programme(s) in the Instagram marketplace'; and 'I intend to purchase tour programme(s) in the Instagram marketplace', on a scale from 1 to 7 (1 = strongly disagree, 7 = strongly agree, α: .923). Finally, given the possibility that

familiarity with the destination (Florence) in the scenario and the presence of certain stimuli may affect the participants' overall responses, this element was included as a covariate in the data analysis, using three items modified from Liu and Mattila (2017) and a scale from 1 to 7 (1 = not at all, 7 = extremely, α: .880): 'How familiar are you with Florence?'; 'How much experience do you have of Florence?'; and 'How knowledgeable are you about Florence?'

3.2.2. Results

Manipulation checks. The participants in the high condition (n = 189, M_{high} = 6.02, SD = 1.768, t = 21.886, p < .01) perceived that the news article was more trustworthy than those in the low condition (n = 143, M_{low} = 2.27, SD = 1.358). Thus, it confirmed a successful manipulation.

Trust in sellers and purchase intentions. One-way ANCOVAs were conducted to examine the effect of trust in Instagram marketplace on trust in sellers and purchase intentions by including a covariate, familiarity with the destination. As shown in Supplement Table 2 (refer to the online supplement), trust in Instagram marketplace significantly affected trust in sellers [(F(1, 329) = 48.658, p < .01, R^2 = .210]. A follow-up analysis showed that the participants in the high condition (n = 189, M_{high} = 5.12, SD = 1.225, t = 7.493, p <.01) had a higher level of trust in sellers than those in the low condition (n = 143, M_{low} = 4.06, SD = 1.326). The effect of familiarity with the destination on trust in sellers was significant [(F(1, 329) = 27.769, p < .01, R^2 = .210]. The results showed that trust in Instagram marketplace also significantly affected purchase intentions [(F(1, 329) = 251.268, p < .01, R^2 = .432]. Specifically, the participants in the high condition (n = 189, M_{high} = 5.81, SD = 1.289, t = 15.883, p < .01) indicated higher purchase intentions than those in the low condition (n = 143, M_{low} = 3.52, SD = 1.310). In this group, the effect of familiarity with the destination on purchase intention was not significant [(F(1, 329) = .707, p = .707, R^2 = .432].

Indirect effect. Study 2 adopted the bootstrap approach of Hayes (2018; Model 4, bias-corrected bootstrap = 5,000), with Model 4 using trust in Instagram marketplace as the independent variable (X), trust in sellers as the mediator (M), familiarity with the destination (S) and purchase intentions as the dependent variables (Y). As shown in Supplement Table 3 (refer to the online supplement), trust in sellers (M) positively affected purchase intentions (Y) when familiarity with the destination (S) was controlled (adjusted R^2 = .4630, Coeff. = .2347, SE = .0573, p < .01). In addition, Supplement Table 4 (refer to the online supplement) shows the significant indirect effects of trust in Instagram marketplace on purchase intentions through trust in sellers (indirect effect = -.2242; 95% CI = -.3886 to -.0918). Thus, H1 was supported.

3.2.3. Implications for follow-up study

The findings of Study 2 empirically confirmed the applicability of trust transfer theory for tourism products by examining the impact of trust in Instagram marketplace (high vs. low) on trust in sellers. The results showed that Gen Z travellers' trust in Instagram marketplace positively affected their purchase intentions mediated by trust in sellers. Given the substantial

role of influencers and their posts, Study 3 examined the interaction effect of Gen Z travellers' trust in Instagram marketplace and influencer posts on trust in sellers and how these affect purchase intentions.

3.3. Study 3: Moderating role of influencer posts (sponsored vs. non-sponsored)

Study 3 was conducted to examine the moderating role of influencer posts in the relationship between trust in Instagram marketplace and trust in sellers by testing H2.

3.3.1. Methods

A 2 (trust in Instagram marketplace: high vs. low) x 2 (influencer posts: sponsored vs. non-sponsored) between-subjects experiment was conducted. For trust in Instagram marketplace, we used the same stimuli for Study 3 as those used in Study 2 (see Supplement Appendix B in the online materials.). Supplement Appendix C shows additional stimuli used for manipulating influencer posts. It is in the online materials. Through G*Power, with a medium effect size of 0.25, an α error probability of 0.05, and 80% power, 269 samples were deemed to be the minimum needed to conduct a two-way ANCOVA. In May 2022, 400 participants were randomly assigned through Prolific to one of four conditions (C1: high trust and sponsored; C2: high trust and non-sponsored; C3: low trust and sponsored; and C4: low trust and non-sponsored). Using a filtering option, the participants who did not participate in Study 2 were exclusively invited to join Study 3.

During data collection, the participants were instructed to read the same scenario that was provided in Study 2. While other measurement items remained the same to assess the attention checks, manipulation checks, trust in sellers (α: .807), purchase intentions (α: .906), familiarity with a destination (α: 874), an additional manipulation check question was used to evaluate effective manipulation of stimuli: 'Based on the scenario, I am certain that this influencers' post is sponsored' (1 = very uncertain, 7 = very certain). After data screening and attention checks, 374 questionnaires were used for data analysis. Similar to the participant profiles in Study 2, 45.7% of the participants were men and 54.3% were women. Regarding their marital status, 73% of the participants indicated that they were single and 8.6% indicated that they were married.

3.3.2. Results

Manipulation checks. The participants in the high condition (n = 229, M_{high} = 5.35, SD = 1.298, t = 13.319, p <.01) perceived that the news article was more trustworthy than those in the low condition (n = 145, M_{low} = 3.37, SD = 1.466). In addition, the participants in the sponsored condition (n = 156, $M_{sponsored}$ = 5.24, SD = 1.905, t = 7.457, p < .01) perceived that influencer posts were sponsored compared with those in the non-sponsored condition (n = 218, $M_{non-sponsored}$ = 3.70, SD = 2.043). Thus, these results confirmed successful manipulations.

Trust in sellers and purchase intentions. Two-way ANCOVAs were conducted to examine the interaction effect of trust in Instagram marketplace and influencer posts on trust in sellers

by including a covariate, familiarity with the destination. As shown in Supplement Table 5 (refer to the online supplement), trust in Instagram marketplace [$F(1, 369) = 80.993$, $p < .01$] had a significant effect on trust in sellers, whereas influencer posts [$F(1, 369) = .080$, $p = .777$] had a non-significant effect. More importantly, the interaction effect of trust in Instagram marketplace and influencer posts on trust in sellers was statistically significant [$F(1, 369) = 8.617$, $p < .01$]. In particular, Figure 3 shows that when the participants had a high degree of trust in Instagram marketplace, they perceived influencer's non-sponsored posts ($M_{\text{high trust and non-sponsored}} = 5.43$) as more trustworthy than sponsored posts ($M_{\text{high trust and sponsored}} = 5.01$). In contrast, when the participants had a low degree of trust in Instagram marketplace, they perceived influencer' sponsored posts ($M_{\text{low trust and sponsored}} = 4.26$) as more trustworthy than non-sponsored posts ($M_{\text{low trust and non-sponsored}} = 3.92$). Familiarity with the destination also had a significant effect on trust in sellers [$F(1, 369) = 14.675$, $p < .01$].

Figure 3. Two-way ANCOVA on trust in sellers (Study 3, n=374)
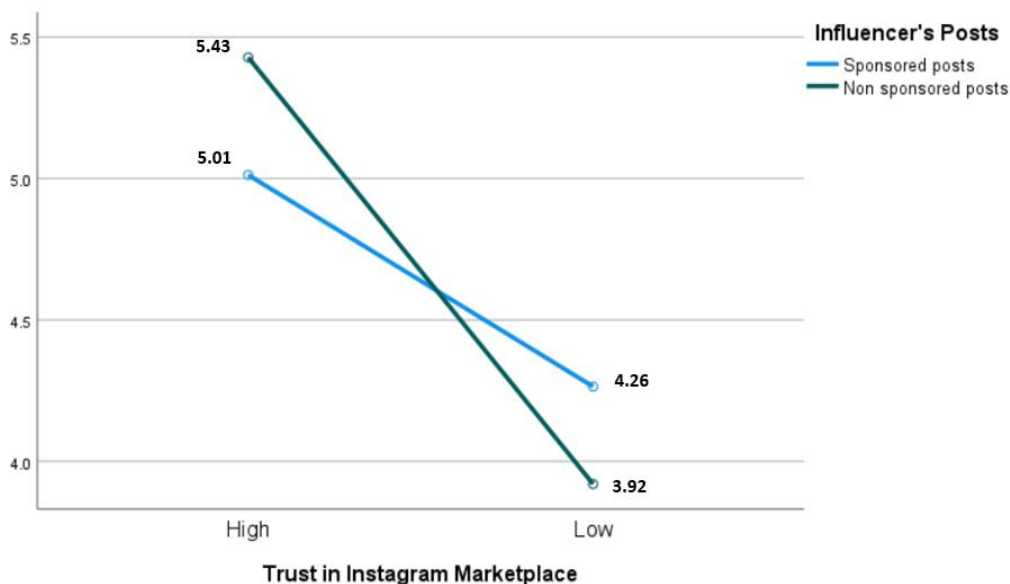
Trust in Instagram marketplace had a significant effect on purchase intentions [$F(1, 369) = 25.681$, $p < .01$], whereas influencer posts had a non-significant effect [$F(1, 369) = .840$, $p = .360$]. More importantly, the interaction effect of trust in Instagram marketplace and influencer posts on purchase intentions was statistically significant [$F(1, 369) = 21.316$, $p < .01$]. Finally, familiarity with the destination also had a significant effect on purchase intention [$F(1, 369) = 4.718$, $p < .01$]

Indirect effect. Study 3 adopted the bootstrap approach of Hayes (2018, Model = 7, bias-corrected bootstrap = 5,000). Model 7 used influencer posts as the moderator (W). Table 1 shows that trust in sellers (M) positively affected purchase intentions (Y) when familiarity with the destination (S) was controlled (adjusted $R^2 = .6540$, Coeff. = .8924, SE = .0353, $p < .01$). In addition, Supplement Table 6 (refer to the online supplement) indicates the significant indirect effect of trust in Instagram marketplace on purchase intentions through

trust in sellers (indirect effect = -.6787; 95% CI = -1.1314 to -.2228). In particular, the conditional indirect effect on purchase intentions was significant for both sponsored posts (effect = -.6676, 95% CI = -.9610, -.3660) and non-sponsored posts (effect = -1.3463, 95% CI = -1.7031, -1.0018). Thus, H2 was supported.

Table 1. Effect of trust in the Instagram marketplace on trust in the sellers and purchase intentions (Study 3, n=374)

	M^a (Trust in the Sellers)			Y^b (Purchase Intentions)		
	Coeff.	SE	p-value	Coeff.	SE	p-value
Study 3 (Model 7)						
Constant	5.1704	.61056	< .01	-1.0990	.2945	< .01
X (Trust in the Instagram marketplace)	.0124	.4006	.9752	.3201	.0943	<.01
W (Influencers' posts)	1.1763	.4039	< .01	-	-	-
X * W	-.7605	.2591	< .01	-	-	-
M (Trust in the sellers)	-	-	-	.8924	.0353	< .01
S (Familiarity with destination)	-.1352	.0353	< .01	.0589	.08237	<.05

Note:
1) X = independent variable; W = moderator; M = mediator; S = covariate; Y = dependent variable
2) ^{a}Adjusted R^2 = .2037; ^{b}Adjusted R^2 = .6540

3.3.3. Implications for follow-up study

The findings of Study 3 aligned with previous studies on sponsorship disclosure and consumer trust. The findings indicated that the participants perceived a higher level of trust in sellers when they were associated with non-sponsored posts and high trust in Instagram marketplace. Interestingly, the opposite results were shown when there was low trust in Instagram marketplace. Compared with millennials, Gen Z are known as a more tech-savvy generation. They are comfortable with and perceive the credibility of virtual influencers. In response, marketers have put effort into utilising virtual influencers to promote their services and products to Gen Z (Moustakas et al., 2022). Meanwhile, how Gen Z travellers perceive virtual influencers associated with tourism product shopping remains an open question. Thus, it is theoretically meaningful and relevant to further examine the moderating role of influencer type (human vs. virtual) in the proposed relationship.

3.4. Study 4: Moderating role of influencer type (human vs. virtual)

Study 4 was conducted to examine the moderating role of influencer type in the interaction effect of trust in Instagram marketplace and influencer posts on trust in sellers by testing H3.

3.4.1. Methods

A 2 (trust in Instagram marketplace: high vs. low) x 2 (influencer post: sponsored vs. non-sponsored) x (influencer type: human vs. virtual) between-subjects experiment was conducted. For trust in Instagram marketplace and influencer posts, the same stimuli used in Studies 2 and 3 were used again (see Supplement Appendices B and C in the online

materials.). Supplement Appendix D shows additional stimuli used for manipulating influencer type—human influencers (hereafter referred to as 'human') and virtual influencer (hereafter referred to as 'virtual'). It is in the online materials. Through G*Power, 400 samples were deemed the minimum needed to conduct a three-way ANCOVA with a medium effect size of 0.25, an α error probability of 0.05, and 95% power; 656 samples were collected from Prolific in June 2022.

Study 4 participants were randomly assigned to one of eight conditions, as follows: C1: high trust, sponsored, human; C2: high trust, sponsored, virtual; C3: high trust, non-sponsored, human; C4: high trust, non-sponsored, virtual; C5: low trust, sponsored, human; C6: low trust, sponsored, virtual; C7: low trust, non-sponsored, human; C8: low trust, non-sponsored, virtual. The filtering option in Prolific guaranteed that these participants were not included in either Study 2 or Study 3. During data collection, the participants were instructed to read the same scenario that was provided in Study 2-3. The measurement items remained the same to assess the attention checks, manipulation checks, trust in sellers (α: .952), purchase intentions (α: .923), and familiarity with a destination (α: .897). Meanwhile, an additional manipulation check question was used to evaluate effective manipulation of stimuli: 'Based on this scenario, I am certain that these posts are created by a human influencer' (1 = very uncertain, 7 = very certain). After data screening and attention checks, 615 questionnaires were used for data analysis. 57.4% of the participants were men and 42.6% were women. A majority of the participants were single, representing 80.8% of the sample.

3.4.2. Results

Manipulation checks. The participants in the high condition (n = 304, M_{high} = 6.63, SD = .498, t = 124.935, p < .01) perceived that the news article was more trustworthy than those in the low condition (n = 311, M_{low} = 1.33, SD = .552). The participants in the sponsored condition (n = 306, $M_{sponsored}$ = 6.31, SD = 1.376, t = 37.710, p < .01) perceived that influencer' posts were heavily sponsored compared with those in the non-sponsored condition (n = 309, $M_{non\text{-}sponsored}$ = 2.04, SD = 1.431). Finally, the participants in the human condition (n = 293, M_{human} = 5.72, SD = 1.672, t = 24.601, p < .01) perceived that influencer posts were highly likely to be created by a human influencer, as opposed to those in the virtual condition (n = 322, $M_{virtual}$ = 2.20, SD = 1.881). Thus, our manipulations were all successful.

Trust in sellers and purchase intentions. Three-way ANCOVAs were conducted to examine the interaction effect of trust in Instagram marketplace, influencer post, and influencer type on trust in sellers and purchase intentions, by including a covariate, familiarity with the destination. As shown in Supplement Table 7 (refer to the online supplement), trust in Instagram marketplace [$F(1, 606)$ = 91.485, p < .01] and influencer type [$F(1, 606)$ = 5.445, p < .05] both had significant effects on trust in sellers, whereas influencer post [$F(1, 606)$ = .380, p = .538] had a non-significant effect. More importantly, the three-way interaction effect of these variables on trust in sellers was found to be significant [$F(1, 606)$ = 11.264, p < .01]. Specifically, the interaction of trust in Instagram marketplace and influencer post was

significant for both the human condition [$F_{(1, 606)} = 3.9256$, $p < .05$] and the virtual condition [$F_{(1, 606)} = 18.3640$, $p < .01$].

For the participants in the human condition (see, Supplement Figure 1 in the online materials), high trust in Instagram marketplace and non-sponsored posts resulted in a higher level of trust in sellers ($M_{high\ and\ non-sponsored} = 4.35$) than for the participants in the condition with high trust in Instagram marketplace and sponsored posts ($M_{high\ and\ sponsored} = 3.88$). The participants in the condition with low trust and sponsored posts also showed a higher level of trust in sellers ($M_{high\ and\ sponsored} = 4.35$) than those in the condition with low trust in the Instagram marketplace and non-sponsored posts ($M_{low\ and\ non-sponsored} = 2.68$).

Interestingly, the participants in virtual condition group showed the opposite results (see, Supplement Figure 1 in the online materials). High trust in Instagram marketplace with sponsored posts ($M_{high\ and\ non-sponsored} = 4.28$) resulted in a higher level of trust in sellers than high trust in the Instagram marketplace with non-sponsored posts ($M_{high\ and\ non-sponsored} = 3.99$). However, low trust in the Instagram marketplace with non-sponsored posts resulted in a higher level of trust in sellers ($M_{low\ and\ non-sponsored} = 3.55$) than low trust with sponsored posts ($M_{low\ and\ sponsored} = 3.30$). Regarding purchase intentions, the three-way interaction effect of trust in Instagram marketplace, influencer post, and influencer type on purchase intentions was significant [$F_{(1, 606)} = 13.595$, $p < .01$]. Finally, familiarity with the destination also had a significant effect on both trust in sellers [$F_{(1, 606)} = 64.368$, $p < .01$] and purchase intentions [$F_{(1, 606)} = 48.821$, $p < .01$].

Table 2. Effect of trust in the Instagram marketplace on trust in the sellers and purchase intentions (Study 4, n=615)

	M^a (Trust in the Sellers)			Y^b (Purchase Intentions)		
	Coeff.	SE	p-value	Coeff.	SE	p-value
Study 4 (Model 11)						
Constant	8.3368	1.4929	< .01	1.5064	.1789	< .01
X (Trust in the Instagram marketplace)	-3.6174	.9499	< .01	-.2090	.0695	< .01
W (Influencer's posts)	-3.2416	.9524	< .01	-	-	-
Z (Influencer type)	-3.2574	.9347	< .01	-	-	-
X * W	2.1971	.6023	< .01	-	-	-
X * Z	2.1001	.5930	< .01	-	-	-
W * Z	2.4157	.5979	< .01	-	-	-
X * W * Z	-1.6603	.3773	< .01	-	-	-
M (Trust in the sellers)	-	-	-	.8727	.0272	< .01
S (Familiarity with destination)	.2255	.0281	< .01	.0292	.0200	.1433

Note:
1) X = independent variable; W = moderator; Z = moderator; M = mediator; S = familiarity with destination' Y = dependent variable
2) ^{a}Adjusted $R^2 = .2584$; ^{b}Adjusted $R^2 = .7049$

Indirect effect. Study 4 adopted the bootstrap approach of Hayes (2018, Model = 11, bias-corrected bootstrap = 5,000). Model 11 used influencer post (W) and influencer type (Z) as

moderators. As shown in Table 2 above, trust in sellers (M) positively affected purchase intentions (Y) when controlling for familiarity with the destination (S) (adjusted R^2 = .7049, Coeff. = .8727, SE = .0272, p < .01). In addition, Supplement Table 8 (refer to the online supplement) shows the significant indirect effects of trust in Instagram marketplace on purchase intentions through trust in sellers (indirect effect = -1.4489; 95% CI = -2.0835 to -.7956). In particular, the conditional indirect effects on purchase intentions were significant in all groups with human and virtual influencers. Thus, H3 was supported.

5. Discussion

This study used trust transfer theory to explore the effectiveness of influencer marketing on Instagram marketplace. In-depth interviews of Gen Z travellers (Study 1) revealed that they perceived Instagram marketplace to consist of unique products and trustworthy sellers, hosted powerful influencers, and was convenient. Based on these findings, a series of experiments (Studies 2–4) revealed that Gen Z travellers' trust in Instagram marketplace positively affected their intention to purchase tour programmes and was mediated by their trust in sellers. In addition, their trust in sellers was enhanced by the interaction effect of high (vs. low) trust in Instagram marketplace and non-sponsored (vs. sponsored) posts when a human influencer was involved, whereas it was enhanced by the interaction effect of high (vs. low) trust in Instagram marketplace and sponsored (vs. non-sponsored) posts when a virtual influencer was deployed. These findings are novel academic contributions and have practical implications.

5.1. Academic contributions

This study makes several academic contributions. First, the findings provide detailed insights into Gen Z travellers and their key interests from a marketing perspective. There has been insufficient examination of these aspects, despite Gen Z being recognised as a digital-savvy, globally focused, and socially and environmentally aware generation that will drive significant changes in the travel industry. Consistent with previous research on Gen Z travellers, we found that Gen Z travellers value uniqueness (vs. conventionality), sharing (vs. ownership), sustainability (vs. unsustainability), and experience (vs. goods) when consuming travel and tourism products. This is consistent with the position that Gen Z travellers show a high interest in responsible consumption and ESG (i.e., environmental, social, and governance) aspects related to climate change, and thus support local businesses (Kim & Austin, 2020). Our findings are also consistent with studies that have shown that Gen Z travellers prefer goods and services produced by ethically responsible companies and those conducting CSR activities (Kim & Austin, 2020). Similarly, Gen Z travellers favour the consumption of products offered by local SMEs and companies, as they Gen Z travellers consider that, for example, joining a guided tour of a village offered by a local SME is socially valuable, as it ultimately benefits the local economy and community (Sakdiyakorn et al., 2021). Thus, Gen Z travellers consider social value to outweigh economic value (Kim & Austin, 2020).

Second, the findings provide novel insights on virtual influencers from a marketing perspective, which has been lacking in the literature (Ahn et al., 2022; Sands et al., 2022). This is because most studies (e.g., Ahn et al., 2022; Sands et al., 2022) have focused on the opportunities and challenges presented by virtual influencers and how to offset the 'uncanny valley' effect of their appearance without addressing in detail how to effectively deploy them on SNS as a marketing tool. Whereas Ahn et al. (2022) examined the impact of virtual influencers' anthropomorphism on Gen Z consumer attitudes towards posts and brands, mediated by social presence and attractiveness, our research examined how influencer type (human vs. virtual) moderates the interaction effects of Gen Z travellers' trust (high vs. low) in the Instagram marketplace and post type (sponsored vs. non-sponsored) on trust in sellers. Our findings statistically verify how different types of influencers moderate Gen Z's trust in the Instagram marketplace associated with promotion posts, which goes beyond the findings of Sands et al. (2022) regarding how to utilise virtual influencers as a marketing tool.

Moreover, while there has been extensive research on the effect of human influencers' sponsored posts on consumer attitudes and behavioural intention (Kim et al., 2021; Martínez-López et al., 2020; Xie & Feng, 2023), there has been no exploration of virtual influencers' posts and trust in sellers. Our study filled these research gaps by examining the interaction effects of trust in Instagram marketplace (high vs. low), post type (sponsored vs. non-sponsored), and influencer type (human vs. virtual) on Gen Z travellers' trust in sellers. The findings revealed that their trust in sellers was enhanced by high trust in Instagram marketplace in combination with non-sponsored posts when human influencers were involved, whereas it was enhanced by high trust in Instagram marketplace in combination with sponsored posts when virtual influencers were deployed. These findings contribute to the marketing and advertising literature by clarifying the relationships between trust, influencer type, and post type in SNS marketplaces.

Third, this study draws on trust transfer theory to examine the impact of Gen Z travellers' trust in the Instagram marketplace on their purchase intentions, mediated by trust in seller. In other words, our study helps uncover the underlying mechanism of trust transfer in the SNS marketplaces. Although some studies have found a positive effect of trust in commercial platforms on trust in sellers (e.g., Chen et al., 2015), no marketing and tourism studies have discussed how Gen Z travellers' trust in the SNS marketplaces is transferred to trust in individual sellers when they purchase tourism products.

Consistent with previous findings in the tourism literature (e.g., Wang et al., 2020), our findings revealed that Gen Z travellers' trust in Instagram marketplace transferred to their trust in individual sellers of tour programmes, ultimately influencing their purchase intentions. While previous studies have focused on Airbnb and Airbnb hosts, whose good reputations have been established for decades, ours is the first empirical study to verify trust transfer in the SNS marketplace to individual tour programme sellers. Given that consumers perceive high risks associated with SNS platforms and sellers (Chen et al., 2015), our study also helps broaden the tourism literature related to trust in SNS marketplaces and Gen Z's shopping behaviour in SNS marketplaces.

5.2. Practical implications

The findings of this study have several practical implications for stakeholders in tourism. First, the findings indicate how destination marketing organisations (DMOs) can develop effective marketing strategies targeting Gen Z travellers. That is, as Gen Z travellers value sustainability (e.g., responsible consumption and support for local businesses), DMOs should emphasise social values and ESG when launching marketing campaigns. Specifically, DMOs can promote their sustainability practices to appeal to Gen Z travellers in several ways: Communicate sustainability initiatives, educate travellers, encourage responsible tourism, showcase destination's natural beauty, collaborate with influencers, and offer eco-friendly accommodations, transportation, and activities that align with Gen Z travellers' sustainability values. These insights will also assist national tourism organisations and policy makers shape tourism policies to better meet the demands of Gen Z travellers than current policies.

Second, the findings of this study can help marketers, particularly those in P2P enterprises (e.g., Airbnb, HomeAway, and Amovens), to effectively deploy virtual influencers. Virtual influencers can be more cost-effective than traditional celebrity influencers, as they do not require travel expenses or high fees. This can be particularly beneficial for P2P businesses with limited marketing budgets. In addition, virtual influencers can be programmed to engage with Gen Z travellers on social media platforms, providing personalized recommendations, answering questions, and creating a sense of community. Finally, using virtual influencers can showcase a P2P business as an innovative and forward-thinking company, which can appeal to Gen Z travellers who value novelty and technological advancements. P2P businesses should ensure that they are designed to align with their brand values and messaging. Additionally, they should engage with Gen Z travellers on social media platforms and provide personalized recommendations to create a sense of community and engagement.

Moreover, given our finding that trust in a platform itself significantly affects how trusted the individual sellers on the platform are, head offices that manage P2P platforms should work to maintain and enhance their overall credibility and reputation in the market. Finally, we found that Gen Z travellers who showed high trust in Instagram marketplace were less sensitive to sponsored (vs. non-sponsored) posts by virtual (vs. human) influencers. Thus, tourism and hospitality marketers should consider hiring virtual influencers to enhance their marketing effectiveness when targeting Gen Z. They could also consider creating virtual influencers to exclusively promote their corporate brand, product, and corporate volunteer programme in the local community as a way to enhance brand reputation in the long run.

5.3. Limitations and recommendations for future research

This study has a few limitations that suggest avenues for future research. First, caution is required when interpreting and generalising the findings, due to the limited sample size and study sites. Gen Z is also not a homogeneous group; thus, to take into account differences in culture, religion, and digital literacy, future studies should conduct comparative analyses across countries. Second, the tour programmes considered in this study cost only 20–40 euros, which is much lower than the typical prices of other key components of travel (e.g.,

flights and accommodations). Thus, the perceived risks associated with purchasing tourism programmes on Instagram marketplace might not be high enough. Future studies should consider a more diverse range of tour programmes (from budget to luxury programmes), in addition to other travel products (i.e., flights, accommodations, experience products), to more accurately assess trust in platforms and sellers. Finally, in this study, only mega-influencers were considered in the moderation analysis. Although this condition was consistent across influencer types (human vs. virtual), Gen Z travellers tend have higher trust in mega influencers than in influencers with fewer followers. Thus, it would be meaningful to investigate trust across a range of sizes of influencers, such as nano-influencers, micro-influencers, macro-influencers, and mega-influencers.

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