The impact of social media influencer's age cue on older adults' travel intention: The moderating roles of travel cues and travel constraints

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ABSTRACT

The global aging population brings a growing older traveler market. This study applies social comparison theory to explore how travel influencers' age cues affect older adults' travel intention through a dual process of assimilation (direct effect) and contrast (mediated by age identity). The moderating effects of travel cues (activity type and presence/absence of companions) and travel constraints are investigated as boundary conditions. Data were collected from older U.S. travelers through three online experiments. The results indicate that older travelers are inclined to visit destinations featured by old (vs. young) influencers, especially those with low intrapersonal or high interpersonal travel constraints. The marketing message is more effective when it features an old influencer pursuing a challenging (vs. relaxing) activity and a young influencer with companions (vs solo travel). The study findings provide valuable insight into leveraging social media influencer marketing for destinations and tourism businesses.

1. Introduction

The growing older population is the fastest and most significant driving force for the tourism industry (Stončikaitė, 2022). According to the United States Census Bureau, about 1 in 3 people (29.9%) in the U.S. were 55 or older in 2020. This older population reached 99.2 million in 2020, an increase of 22.4 million from 2010. The aging Baby Boom cohort primarily drives growth at older ages and has continued to outpace the growth at younger ages (Blakeslee et al., 2023). Because the aging baby boomers are healthier, have more disposable income, and show greater desires to seek new experiences, self-identity, adventure, and well-being through travel than previously retired cohorts, they are thought to be a major force driving thriving senior tourism (Patterson et al., 2017). In the U.S., Americans aged 50 or older spent $7314 in travel annually before the pandemic. Their willingness to spend would be stronger after the COVID-19 pandemic, with an estimated travel budget of $8369 in 2022 (Levy, 2022).

Parallel to the burgeoning senior tourism, older people are becoming increasingly active on social media. Roughly 73% of Americans aged 50 to 64 and 45 % of those aged 65 and older used social media in 2021 (Pew Research Center, 2022). Additionally, most U.S. adults (84%) reported relying on travel influencers for trip recommendations (Statista, 2023). Social media influencers attract a large volume of fans by creating and sharing original content on social networks (Xu & Pratt, 2018). They are powerful opinion leaders who can shape and impact followers' attitudes and behaviors (Gretzel, 2017). While many social media influencers are young, older content creators, also called "grandfluencers," are gaining popularity (Köttl et al., 2022). A compelling instance is Linda Malys Yore, who commenced her travel blogging journey at age 65 and currently boasts over 53,000 followers. Her successful collaborations with major hospitality brands, including Waldorf Astoria (Hoeller, 2020), underscore her influential presence. Another noteworthy case is retired National Football League star Rob Gronkowski, who orchestrated a triumphant TikTok campaign in partnership with Carnival Cruise Lines and the retiree-focused group Retirement House. This initiative has amassed an impressive 120.4 million likes and garnered substantial coverage from prominent U.S. media outlets (Goldman, 2023).

Despite the growing use of social media influencers in tourism marketing campaigns and the significance of the older traveler market

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(Bokunewicz & Shulman, 2017; Patterson et al., 2017), there are three major gaps in the existing research. First, the effects of social media marketing on older travelers are rarely investigated (Zhong et al., 2021), let alone in the area of social media influencers. Most research on influencer marketing focuses on young consumers (Djafarova & Rushworth, 2017). However, studies have indicated that older consumers evaluate ad sources and influencer presence differently from younger consumers (Grigsby & Skiba, 2022). Second, current influencer marketing literature mainly examines general characteristics of influencers, such as attractiveness or trustworthiness (Leung et al., 2022; Vrontis et al., 2021). It remains unclear how specific cues, such as an influencer's age, affect older consumer's self-perception and behavioral intentions. Age is a critical social cue for making judgments and establishing social categorization (Levy & Banaji, 2002). In Western societies, older people often face ageism and stereotype threats, which can influence their consumption decisions differently than younger individuals (Amatulli et al., 2018; Levy & Banaji, 2002). Third, the literature on older consumer behaviors based on stereotype threat theory suggests that older individuals may distance themselves from old influencers to avoid negative stereotypes (Amatulli et al., 2018; Bae & Jo, 2024). Conversely, influencer marketing literature highlights the positive effects of influencer-consumer congruence or similarity (Sun et al., 2021; Xu & Pratt, 2018), suggesting that older consumers might prefer old influencers over young ones, leading to contradictory findings.

To address these gaps, this study delves into how travel influencers' age cue affects older traveler's age identity and travel intentions. Drawing on the social comparison theory, the study examines the underlying mechanism older travelers undergo when exposed to influencers of varying ages. The study also investigates the moderating effects of travel cues (i.e., travel activity and travel companions) and travel constraints (i.e., intrapersonal and interpersonal) faced by older travelers. This study makes significant theoretical contributions by reconciling inconsistent findings from research on older consumers and influencer marketing. It elucidates the complex processes of assimilation and contrast that older travelers experience in social comparison with older influencers. The study provides a comprehensive view of the psychological mechanism older travelers undergo, considering both influencer-shared travel cues and their travel constraints. Practically, the study findings offer valuable insights for destination marketing organizations on leveraging social media influencers to attract older travelers.

2. Literature review

2.1. Social media influencer marketing

In the era of social media, everyday consumers are empowered to shift their role from being passive information recipients to active co-creators who can voice and share their opinions about a brand or service with a large network of audiences (Cheung et al., 2022). This trend has given rise to the emergence of social media influencers (Schouten et al., 2020). Compared to traditional celebrities, social media influencers are more powerful in influencing other's attitudes and behavioral intentions due to their perceived trustworthiness, similarity, and assimilation (Djafarova & Rushworth, 2017; Schouten et al., 2020). Nevertheless, the enormous social capital influencers amass enables them to create numerous positive consumer outcomes such as attitudes towards advertisements, brand recognition and trust, online engagement, and purchase intention (Vrontis et al., 2021).

While the effectiveness of influencer marketing is generally agreed upon, researchers hold more divergent views on its antecedents and underlying mechanisms (Vrontis et al., 2021). One major group of antecedents discussed in the existing literature is influencers' characteristics. Research has consistently concluded that influencers' attractiveness (both physical and social), trustworthiness,

expertise/knowledge, similarity, and inspiration play critical and differentiating roles in driving their popularity (e.g., Leung et al., 2022). Others highlighted the importance of influencer-product congruence (e.g., Belanche et al., 2021; Kim & Kim, 2021). A high level of influencer-product fit causes followers to infer higher affective motives (Kim & Kim, 2021) and increase perceived self-product congruence (Belanche et al., 2021), resulting in more positive attitudes towards the product and stronger behavioral intention. Additionally, research has found that influencer-consumer similarity significantly affects an influencer's credibility, popularity, and social attractiveness, thereby increasing purchase intention (Leung et al., 2022; Schouten et al., 2020; Sun et al., 2021; Vrontis et al., 2021). In the hospitality and tourism field, there is also growing research interest in influencer marketing. Most of them draw similar conclusions, highlighting the influencer's characteristics (Bokunewicz & Shulman, 2017; Leung et al., 2022) and influencer-destination or influencer-traveler congruence (Sun et al., 2021; Xu & Pratt, 2018).

Although existing social media influencer research has advanced our understanding of this topic, one major gap is that most studies investigate relatively younger cohorts of consumers, in which most participants are under 40 years old (e.g., Belanche et al., 2021; Cheung et al., 2022; Djafarova & Rushworth, 2017). Another research gap is that most influencer marketing literature focuses on the general characteristics of influencers, such as attractiveness or trustworthiness (e.g., Leung et al., 2022; Vrontis et al., 2021) while overlooking the effects of their age cues, which is one of the most visual traits that people identify with quickly (North & Fiske, 2012). However, older consumers' responses to influencers of different age cues may vary from younger cohorts due to their different experiences (Grigsby & Skiba, 2022). One notable experience is the stereotype threats older people commonly face (Amatulli et al., 2018; Bae & Jo, 2022). In today's youth-centric society, older people are often implicitly considered less competent, less attractive, more socially isolated, and more dependable on others (Levy & Banaji, 2002). Thus, older people tend to adopt a younger age identity to resist the stigma associated with old age (Montepare, 2009). Older people's "youth bias" can further influence their consumer behavior and consumption experiences, leading to their dissociation from the old-age group (Amatulli et al., 2018; Bae & Jo, 2022).

Interestingly, research on social media influencers, which stressed the positive effects of influencer-consumer congruence or similarity on consumption intention (e.g., Xu & Pratt, 2018), offers a contradictory perspective from research on older consumers. Both research streams may portray only a partial and unidirectional view of the effects of age cues on older consumers' age identity and their subsequent decision-making. According to social comparison theory, others' age can be used to construct one's group- and self-identities in social comparison. During this process, assimilation and differentiation can occur simultaneously when constructing different levels of identities depending on the comparison targets (Brewer, 1991; Collins, 2000). Due to the age closeness, older consumers thus may experience concurrent processes of identifying with and differentiating with their older age group. Using social comparison theory as the theoretical framework, this study reconciles conflicting perspectives of previous research and provides a more comprehensive view of how age cues of influencers affect older travelers' identity and travel intention.

2.2. Social comparison theory

Social comparison theory was first proposed by Festinger (1954), who posited that people are motivated to evaluate their abilities and opinions by comparing with others when no objective means are available. The core tenet of Festinger's (1954) seminal theory is the similarity hypothesis, which maintains that people seek comparison with similar others to gain precise and stable self-assessment. Subsequent research showed that people also compare with dissimilar others, and the complexity of such social comparison resides in potentially

concurrent assimilation/contrast processes and comparison directions (Gerber et al., 2018). Assimilation refers to the outcome that one perceives shared similarities with comparison targets and includes them in his identity, whereas contrast goes the opposite direction, in which one distinguishes himself from the targets (Brewer, 1991; Suls et al., 2002). There are two contrast directions: upward comparison, when people compare to others who are superior or better off, and downward comparison, when individuals compare to inferior and less fortunate others (Wood, 1989). Regardless of the comparison directions, two processes, assimilation and contrast, may occur simultaneously (Brewer, 1991).

Research has shown that the outcomes of social comparison might exhibit a more complex nature than a straightforward and unidirectional contrast depending on the comparison target. When large discrepancies exist between self and comparison targets, such as in the case of older travelers faced with young influencers, unidirectional contrast automatically arises, and large discrepancies can lead to the outcome that comparison targets are considered irrelevant or as outgroup members (Brewer, 1991; Collins, 2000). Conversely, when social comparison involves moderate differences in associated attributes, such as older travelers faced with old influencers, this ambiguous information can concurrently result in assimilation and contrast. In such instances, the moderate difference may imply both likeness and difference simultaneously (Collins, 2000). Brewer (1991) explained the conflict between assimilation and contrast in social comparison. She posited that the social self is not a mere dichotomous continuum of similarity and dissimilarity but rather a synthesis between assimilation and contrast that satisfies the human need to maintain similarity and individual distinctiveness with group members (Brewer, 1991).

Expanding this theoretical perspective to understand how influencers' age cues affect travel intentions of older people, we suggest that old influencers exhibit more moderate age differences with older travelers than their young counterparts. Thus, older travelers may undergo assimilation and contrast when compared to old influencers. Specifically, older travelers are prone to assimilate more readily with old influencers on a group identity level than with young influencers. According to Collins (2000), people anticipate similarity with those who rank close to themselves in the population distribution. This can also be explained by the selective accessibility mechanism, wherein visual age similarity makes other congruent information cognitively more accessible in comparison, and thus activates a social "we" identity and provides a basis to form a sense of belonging, psychological closeness, and group membership (Brewer, 1991; Mussweiler, 2007; Stapel & Koomen, 2001). Hence, older travelers are inclined to believe that they share similar preferences with old influencers, amplifying their intention to visit recommended destinations. This rationale finds support in recent influencer marketing studies, which suggest that influencer-consumer similarity bolsters influencers' credibility, attractiveness, and influence power on consumers' purchase intention (Schouten et al., 2020). Conversely, in comparisons involving young influencers, extreme differences in age cues inherently evoke contrast. Consequently, older travelers tend to categorize young influencers as outgroup members, thereby perceiving them as less relevant in assessing their travel intention (Wood, 1989). Thus, the study proposes.

H1. *Older travelers are more likely to visit destinations featured by old social media influencers (vs. young social media influencers).*

In addition to the direct effect of influencers' age cues on travel intention, it is pertinent to consider the potential mediating role of age identity. Age identity, also referred to as subjective age, is an integral part of personal identity, delineating individuals' perceptions and experiences of their age (Montepare, 2009). Previous research has suggested that age identity is a stronger predictor of behaviors than chronological age (Guiot, 2001; Montepare, 2009). In Montepare's (2020) study involving U.S. adults aged 55 and older, subjective age emerged as a more consistent predictor than actual age for most activities, such as social interactions, personal fitness, grooming, body

maintenance, and styling activity.

Older travelers may gravitate towards associating with their age group rather than younger groups (Collins, 2000), but still engage in individual-level comparisons within their group. Specifically, older travelers are likely to make downward comparisons with old influencers and upward comparisons with younger ones (Levy & Banaji, 2002). Levy and Banaji (2002) reported that older individuals had negative implicit attitudes toward their own age group and positive attitudes toward young people. Other gerontological research supports the idea that older adults exhibit a youthful bias, often perceiving themselves as healthier and processing more desirable traits than their similar-aged peers (Robinson-Whelen & Kiecolt-Glaser, 1997). Consequently, when exposed to old influencers, older travelers are likely to engage in downward comparisons, adopting a younger age identity (Montepare, 2020; Stephan et al., 2015). This younger age identity is associated with positive, health-promoting activities, such as physical exercise, social interactions, vacations, and maintaining an open and agreeable personality (Montepare, 2020; Stephan et al., 2015).

Conversely, the presence of a young influencer highlights the age difference (Stapel & Koomen, 2001), prompting upward comparisons among older travelers (Levy & Banaji, 2002). Upward comparisons can negatively affect self-evaluation and self-regard (Collins, 1996; Suls et al., 2002), leading older travelers to adopt an older age identity. Research indicates that an older age identity negatively impacts productive activities and physical functioning in older individuals (Nagy et al., 2019; Stephan et al., 2013). The mediating role of age identity between age cues and older people's consumption behaviors was further supported by Amatulli et al. (2018). Therefore, this study proposes.

H2. *Perceived age identity significantly mediates the effect of influencer's age cue on older travelers' travel intention. Specifically, older travelers are more likely to visit destinations featured by old influencers because they adopt a younger age identity (vs older identity in the case of young influencers).*

2.3. Moderating effects of travel cues

Age cues do not work in isolation. Influencers often share their travel stories by disclosing other travel-related information, such as activities they do and companions they travel with. To present a more holistic view on how influencers' age cues affect older traveler's travel intention, this study delves into the moderating effect of travel activity type and presence/absence of travel comparisons. Travel activities and travel companions, served as travel cues shared in influencers' narratives, are included in the study due to empirical evidence indicating their substantial cognitive and emotional ramifications on travelers, which in turn impact their behavioral intention (Liu et al., 2023; Su et al., 2020, 2021).

It should be noted that travel activities are not uniform, and they can be generally categorized into challenging versus relaxing activities (Liu et al., 2023). Challenging activities, relative to relaxing ones, require more specialized skills and greater physical and cognitive demands (Liu et al., 2023; Su et al., 2020). Compared to relaxing activities, challenging activities are more likely to excite travelers, evoke eudemonic well-being, and promote desirable experience sharing (Liu et al., 2023; Su et al., 2021). Although older people are often stereotyped as less capable of or interested in engaging in challenging activities, recent research has shown that an increasing number of older travelers are engaging in adventure tourism activities such as scuba diving (Gregory, 2023). Additionally, travel without companions can be daunting and risky at a later life stage, and a lack of travel companions is often considered by older travelers as a barrier (Kazeminia et al., 2015). The presence or absence of companions affects the arousal level felt by travelers (Su et al., 2020) and their post-trip experience sharing (Su et al., 2021).

Although tourism activities and travel companions are important factors in shaping travelers' experience, their roles as travel cues shared

by an influencer have rarely been examined. Building on the framework of social comparison theory, this study seeks to elucidate the moderating effect of these travel cues on the direct and indirect relationships between age cue and travel intention. While challenging activities tend to be exciting, older travelers also perceive elevated risks and demands than relaxing activities, which intensifies their need to apply social comparison to gain information for anticipating their potential success in such challenging tasks. Social comparison theory indicates people tend to perceive others who share similarities as personally relevant, thereby increasing influence on preference evaluation (Stapel & Koomen, 2001; Suls et al., 2002). Consequently, older travelers are more inclined to identify with old influencers, who possess a closer age resemblance than young influencers, heightening their travel intention. However, in scenarios involving relaxing activities, older travelers are less reliant on others for ability appraisal. Therefore, their travel intention remains consistent regardless of exposure to older or younger social media influencers.

H3. *Travel activity type significantly moderates the effect of influencer's age cue on older travelers' travel intention. Specifically, when influencers share challenging activities, older travelers are more likely to visit destinations featured by old influencers (vs. young influencers). Conversely, when influencers share relaxing activities, older travelers' travel intentions do not change, no matter whether they are old or young.*

Travel activities could also influence how older adults perceive their age identities. Previous research found that older adults feel younger when engaging in physically challenging activities than relaxing activities (Chua et al., 1990; Stephan et al., 2013). The perceived younger age identity is more likely to alter their behaviors in response to challenging activities compared to relaxing ones (Szymczak et al., 2020). In a similar vein, this study proposes that when an old influencer shares challenging activities (vs. relaxing activities), older travelers perceive younger age identities, leading to their higher travel intention.

H4. *Travel activity type significantly moderates the mediation effect of age identity between influencer's age cue and older travelers' travel intention. Specifically, when influencers share challenging activities (vs. relaxing activities), the mediation effect of age identity is magnified.*

There can be comparable interaction effects between age cues and travel companions. Travel without companions can be perceived as riskier, as companions often serve as a means of adaptation to unfamiliar or challenging situations (Kazeminia et al., 2015). Therefore, when exposed to travel scenarios without companions, older travelers exhibit a greater propensity to seek old influencers with more similar references than young influencers in evaluating their likelihood of success. Thus, old influencer's sharing of solo travel will bolster older individuals' travel intentions. When travel companions are present in influencers' posts, older travelers may envision the trip as less daunting and precarious. Therefore, they are less reliant on others for ability appraisal. As a result, their travel intention remains consistent regardless of exposure to old or young social media influencers.

H5. *Presence/absence of travel companions significantly moderates the effect of influencer's age cue on older travelers' travel intention. Specifically, when influencers share solo travel experiences, older travelers are more likely to visit destinations featured by old influencers (vs. young influencers). Conversely, when influencers share travel experiences with companions, older travelers' travel intentions do not change, no matter whether they are old or young.*

Similarly, we propose that the presence/absence of travel companions would influence how older adults perceive their age identities. Previous research demonstrated that older adults are perceived to be relatively younger and have strong physical functioning if they live alone (Covinsky, 2013; Ennis et al., 2014), especially there is an increase in the population of older adults living alone (Shaw et al., 2018). Therefore, this study proposes that when an old influencer shares solo

travel experiences (vs. group travel), older travelers perceive younger age identities, leading to their higher travel intention.

H6. *Presence/absence of travel companions significantly moderates the mediation effect of age identity between influencer's age cue and older travelers' travel intention. Specifically, when influencers share solo travel experiences (vs. travel experiences with companions), the mediation effect of age identity is magnified.*

2.4. Moderating effects of travel constraints

The previous sections have explored the impact of influencers' age cue and travel cues, including activity type and travel companions, from the perspective of travel influencers. However, these discussions have not considered the travel constraints that older individuals may encounter. Such constraints are commonplace in later life stages due to declining health and diminishing ability (Kazeminia et al., 2015). Thus, the study also applies the hierarchical leisure constraints model to explain the moderating effects of different travel constraints on the relationship between age identity and travel intention.

Travel constraints refer to perceived or actual barriers that deter travel (Kazeminia et al., 2015). Existing tourism research validates three types of leisure constraints: intrapersonal, interpersonal, and structural constraints (Chen & Petrick, 2016; Godbey et al., 2010; Kazeminia et al., 2015). Intrapersonal constraints are internal factors that condition one's will to act and travel preference, such as personal interest, perceived activity appropriateness, perceived physical inability, and negative emotions (e.g., depression and anxiety). Interpersonal and structural constraints are external factors. The former involves a lack of companions to travel with, and the latter is related to a lack of time, money, information, choices, or transportation (Kazeminia et al., 2015).

According to the hierarchical leisure constraints model, three constraints exert hierarchical and varying effects on leisure participation (Crawford et al., 1991). Intrapersonal constraint holds the greatest influence in determining participation, which is first negotiated to establish interest and preference. Once leisure preference is formed, the negotiation process then proceeds with interpersonal constraints and, lastly, structural constraints. Interpersonal and structural constraints are thought to influence the link between preference and participation (Crawford et al., 1991; Godbey et al., 2010). Previous research suggests that when one ages, intrapersonal constraints increase and structural constraints decrease in leisure participation (Son et al., 2008). In the travel context, Kazeminia et al. (2015) found that intrapersonal and interpersonal constraints are more frequently mentioned by senior travelers as travel constraints than structural constraints (Kazeminia et al., 2015). Out of this consideration, this study focuses on interpersonal and intrapersonal constraints among older travelers and investigates their moderating effects on the linkage between age identity and travel intention.

We propose that intrapersonal and interpersonal constraints exert differential moderating effects. Intrapersonal constraints directly relate to leisure preference (Crawford et al., 1991). Among older travelers with lower intrapersonal constraints, established travel interest enables age identity to influence travel intention. On the contrary, high perceived intrapersonal constraints diminish travel interest, precluding age identity's motivational effects on travel intention. In other words, although perceived age identity positively impacts travel intention, this effect is significant only when intrapersonal constraints are low. When intrapersonal travel constraints are high, even if participants perceive themselves as younger, they still have low travel intentions.

H7. *Intrapersonal travel constraints significantly moderate the mediating effect of perceived age identity. Specifically, low (vs high) intrapersonal travel constraints magnify the mediation effect of age identity on travel intention.*

However, the effects of age identity on travel intention are likely to be reversed with interpersonal constraints. According to the hierarchical

leisure constraints model, interpersonal constraints can be negotiated once intrapersonal constraints are confronted, and activity preference has been established (Crawford et al., 1991). Research has shown that people perceiving high constraints may still participate in activities, as certain constraints trigger the use of negation resources and strategies (Hubbard & Mannell, 2001; Son et al., 2008). For example, senior travelers overcome interpersonal constraints by joining travel groups or purchasing tours (Kazeminia et al., 2015). Motivation is one of the psychological resources employed in the constraint negation process: strong motivation can counteract the negative effects of constraints on participation (Hubbard & Mannell, 2001; Son et al., 2008). As age identity is shown to have the power to propel or limit individuals in physical activity participation (Montepare, 2020; Stephan et al., 2015), this study posits that it serves as an effective motivator.

Following this logic, we posit that once older travelers form their travel interests, a high level (vs. low level) of interpersonal constraints may positively influence their usage of negotiation resources and strategies (Son et al., 2008). Thus, age identity is more likely to be drawn as a psychological resource to determine their travel intention among those with high perceived interpersonal constraint than those with a low level. In other words, when interpersonal constraints are high, older people who feel younger are more likely to travel. On the contrary, when interpersonal constraints are low, older adults are always willing to travel regardless of their age identity. Thus, the effect of age identity on travel intentions among older adults who have low interpersonal constraints is mitigated.

H8. *Interpersonal travel constraints significantly moderate the mediating effect of perceived age identity. Specifically, high (vs low) interpersonal travel constraints magnify the mediation effect of age identity on travel intention.*

2.5. Overview of studies

To test the proposed hypotheses, three experiments are designed, as illustrated in Fig. 1. Study 1 conducts a one-factor experiment to examine the main effects of an influencer's age cue on older travelers' travel intention (H1) and the mediation effect of age identity (H2). Study 2 uses a different scenario design and adds another manipulated variable, activity type, to investigate the moderation effects of activity type (H3 & H4) on top of the main and mediation effects (H1 & H2). Since the newly manipulated variable in Study 2, activity type, is associated with intrapersonal travel constraints, Study 2 also explores the boundary condition of intrapersonal travel constraints in this mechanism (H7). Study 3 employs another scenario design with travel companion as a manipulated variable to explore the moderation effect of travel companion (H5 & H6) in addition to main and mediation effects (H1 & H2). As the newly manipulated variable in Study 3, the travel companion is a key element in interpersonal travel constraints. Study 3 also investigates the boundary condition of interpersonal travel constraints in the proposed mechanism (H8).

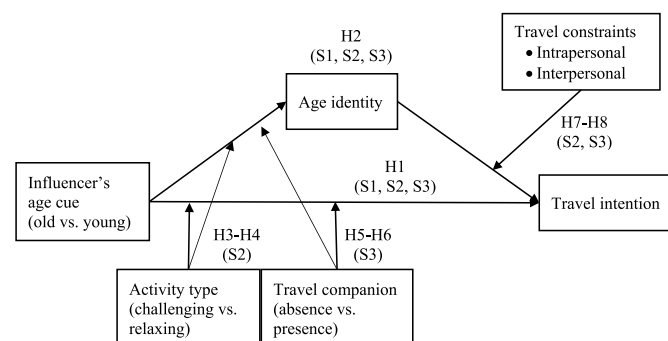The scenario design in the three experiments was diversified in terms

Fig. 1. Research framework.

of the influencer's gender, social media platform, and destination type to increase the external validity of the study findings. The three social media platforms (Instagram in Study 1, Facebook in Study 2, and YouTube in Study 3) were chosen because they are the most used social media platforms both by older Americans and for influencer marketing. The three designation types (national park in Study 1, beach in Study 2, and road trip in Study 3) because they are among the best destination types for older travelers. All study designs have received approval from the Institutional Review Board (IRB) and adhere strictly to ethical guidelines concerning human research.

3. Study 1

3.1. Design, stimuli & measures

Study 1 examines whether a social media influencer's age cue impacts older travelers' travel intention directly and indirectly through the mediation of age identity, testing H1 and H2. The target population of this research is older travelers (age 55 or older) residing in the United States. There are no consistent criteria to define older adults. Considering the importance of baby boomer travelers to the tourism market (Patterson et al., 2017; Zhong et al., 2021), the study adopted this age category because the United States Census Bureau defined the youngest baby boomer cohorts started at 55 years old (Blakeslee et al., 2023). A one-factor between-subjects design (influencer's age cue: old vs. young) was conducted with 101 U.S. older adults in May 2022. Participants were recruited via Prolific (https://www.prolific.co/), a crowdsourcing marketplace. Only older U.S. residents who had taken a trip in the past 12 months and used Instagram at least once a week were included in this study. The sample consisted of 48.5% female and 88.1% White (4% Hispanic, 3% Asian, 1% African American) with an average age of 62.8 (SD = 6.06). The majority of the respondents (87.1%) had some college education. More than half of the respondents (54.5%) had an annual household income over $60k. Over 67% of the respondents take at least two trips a year.

The participants were told to imagine that they were making a travel plan and saw a travel influencer's Instagram page. They were then randomly assigned to one of the two scenarios: an old male social media influencer or a young male social media influencer who shared some national park pictures (See Appendix A). After reading the assigned scenario, participants were asked to complete a questionnaire. Participants were allowed to discontinue the survey at any juncture if they experienced discomfort.

The scales used in the study were all adapted from previous research (Appendix B) and slightly reworded to fit the study context. All scales utilized a seven-point Likert scale. The measurement for age identity was adapted from Barak (2009), encompassing four dimensions: "feel-age," "look-age," "act-age," and "interest-age," and was assessed with a comparative scale, ranging from "a lot younger" to "a lot of older" (Galambos et al., 2009). The scale for travel intention included three items borrowed from Wen and Leung (2021). Both scales were found to be reliable (Cronbach's α > 0.7). The mean scores of all constructs were used in subsequent analyses. T-test and Process were conducted using SPSS software to test hypotheses. The manipulation check question asked respondents to indicate whether the influencer pictured in the scenario looked young or old (1 = young, 7 = old). The *t*-test results indicated that the manipulation of the influencer's age cue was successful ($M_{old} = 6.25$, $M_{young} = 1.42$, $t = 38.24$, $p < 0.001$).

3.2. Main & mediating effects

A *t*-test was performed to analyze the effects of the influencer's age cue on older travelers' travel intention. The results revealed significant main effects of the influencer's age cue on older travelers' travel intention ($M_{old} = 4.67$, $M_{young} = 4.01$, $t = 2.54$, $p = 0.013$). As proposed, when exposed to old social media influencers (vs. young social media

influencers), older travelers generated higher travel intentions. Therefore, H1 were supported.

PROCESS Macro Model 4 was then conducted to test the mediating effect of age identity. The results showed that age identity significantly mediated the relationship between the influencer's age cue and older travelers' travel intention (Effect = 0.16, S.E. = 0.10, 95% CI [0.00, 0.37]), supporting H2. Specifically, when exposed to old influencers (vs. young influencers), older travelers perceive younger age identities (β = 0.43, t = 2.62, p = 0.010), leading to higher travel intentions (β = 0.38, t = 2.41, p = 0.018).

3.3. Discussion

Study 1 results support H1 and H2 to demonstrate that older travelers are more likely to travel to destinations featured by old influencers (vs. young influencers). In addition, older travelers are more likely to follow old influencers' travel recommendations because they felt younger when exposed to old influencers (vs. young influencers). In the next study, different scenarios were designed to replicate Study 1 and test how activity type moderates the effects tested in Study 1.

4. Study 2

4.1. Design, stimuli & measures

Study 2 incorporated a second manipulated variable, activity type, to investigate the interaction effect of activity type and influencer's age cue in addition to the main and mediation effects tested in Study 1. Study 2 also evaluated how the effect of age identity on travel intention varies with intrapersonal travel constraints. A 2 (influencer's age cue: old vs. young) × 2 (activity type: relaxing vs. challenging) between-subjects design was conducted with 188 U.S. older adults (age 55 or older). The participants were recruited via Prolific (https://www.prolific.co/), a crowdsourcing marketplace. Only older U.S. residents who had taken a trip in the past 12 months and used Facebook at least once a week were included in this study. The sample consisted of 50.0% female and 94.7% White (2.7% Asian, 1.6% African American, 0.5% Hispanic) with an average age of 62.1 (SD = 5.73). The majority of the respondents (86.7%) had some college education. More than half of the respondents (59.6%) had an annual household income over $60k. Over 70% of the respondents take at least two trips a year.

Study 2 designed different scenarios from Study 1. Study 2 used Facebook as the social media platform and beaches as the travel destination. In order to choose relaxing and challenging activities older travelers perform on beaches, a pretest was conducted with 57 U.S. older adults (age 55 or older) via MTurk (https://www.mturk.com/) in August 2022. The participants were asked to rate nine beach activities (Pascoe, 2019) on the Rating of Perceived Exertion scale (Borg, 1982). The results indicated that older people viewed sunbathing as a relaxing activity while surfing as a challenging activity ($M_{sunbathing}$ = 4.30, $M_{surfing}$ = 5.33, t = 3.11, p = 0.001). Thus, sunbathing and surfing were used in the stimuli design in Study 2.

The participants were told to imagine that they were making a travel plan and saw a travel influencer's Facebook page. They were then randomly assigned to one of the four scenarios: an old female social media influencer or a young female social media influencer who shared a picture of sunbathing or surfing on the beach (See Appendix A). After reading the assigned scenario, participants were asked to complete a questionnaire. The scales used in Study 2 were the same as Study 1, plus the scale for intrapersonal constraints borrowed from Chen and Petrick (2016) and Nyaupane and Andereck (2008) (Appendix B). All scales were found to be reliable (Cronbach's α > 0.7). The mean scores of all constructs were used in subsequent analyses. ANOVA and Process were conducted using SPSS software to test hypotheses.

To test the manipulation of the influencer's age cue, the respondents were asked to indicate whether the influencer pictured in the scenario

looked young or old (1 = young, 7 = old). The t-test results indicated that the manipulation of the influencer's age cue was successful (M_{old} = 6.53, M_{young} = 1.49, t = 49.86, p < 0.001). To test the manipulation of activity type, the respondents were asked to rate the activity that the influencer performed in the scenario on two items (passive … active; physically unchallenging … physically challenging; Borg, 1982). The t-test results indicated that the manipulation of activity type also worked as expected ($M_{relaxing}$ = 1.65, $M_{challenging}$ = 6.68, t = 39.76, p < 0.001).

4.2. Main & interaction effects

An ANOVA was performed to analyze the effects of the influencer's age cue and activity type on older travelers' travel intention. The results revealed a significant main effect of the influencer's age cue (M_{old} = 3.69, M_{young} = 3.46, F = 4.31, p = 0.039) on older travelers' travel intention. Similar to Study 1, old social media influencers (vs. young social media influencers) evoked higher travel intentions among older travelers. Thus, H1 is supported.

The result also indicated a significant interaction effect between the influencer's age cue and activity type on older travelers' travel intention (F = 5.84, p = 0.017), supporting H3. As Fig. 2 shows, older travelers generated higher travel intention when an old (vs. young) social media influencer shared a challenging activity at a destination (M_{old} = 3.97, M_{young} = 3.62, t = 1.76, p = 0.082). However, when the influencer shared a relaxing activity during the trip, older travelers did not show any significant difference in travel intention between an old influencer and a young influencer (t = 0.41, p = 0.681). In other words, older travelers generated higher travel intention when an old social media influencer shared a challenging activity (vs. relaxing activity) at a destination ($M_{relaxing}$ = 3.40, $M_{challenging}$ = 3.97, t = 2.22, p = 0.029). However, when it comes to a young social media influencer, older travelers did not show any significantly different travel intentions between a relaxing activity and a challenging activity (t = 1.16, p = 0.521).

4.3. Mediating and moderating effects

PROCESS Macro Model 4 was conducted to test the mediating effect of age identity. The results showed that age identity significantly mediated the relationship between the influencer's age cue and older travelers' travel intention (Effect = 0.09, 95% CI [0.00, 0.21]), supporting H2.

PROCESS Macro Model 7 was conducted to test the moderated mediation effect of travel activity type and age identity proposed in H4. The results indicated that there was not a significant moderated mediation effect (Index = 0.06, 95% CI [−0.10, 0.24]), rejecting H4. The conditional indirect effect results revealed that only when the influencer shares challenging activities, age identity significantly mediates the effect of the influencer's age cue on older travelers' travel intention
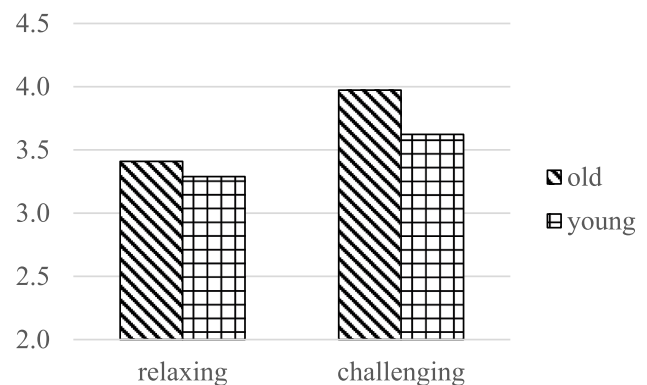

Fig. 2. Interaction effect between influencer's age cue and activity type.

(Effect = 0.12, 95% CI [0.00, 0.27]). When the influencer shares relaxing activities, age identity did not show a significant mediation effect (Effect = 0.06, 95% CI [−0.05, 0.17]).

PROCESS Macro Model 14 was run to analyze the conditional effects of intrapersonal travel constraints proposed in H7. The results failed to identify a significant moderated mediation effect (Index = −0.02, 95% CI [−0.09, 0.03]). However, the conditional indirect effect results showed that only when older travelers perceived low intrapersonal travel constraints (≤2.18), age identity had a significant mediation effect between the influencer's age cue and travel intention (Effect = 0.09, 95% CI [0.01, 0.19]). When older travelers perceived high intrapersonal travel constraints (≥3.15), there was no significant mediation effect of age identity (Effect = 0.04, 95% CI [−0.03, 0.15]). Therefore, H7 was supported.

4.4. Discussion

Study 2 results provide further support for H1 and H2, replicating the findings from Study 1. Older travelers are more likely to visit the destination recommended by old influencers (vs. young influencers) due to their perceived younger age identities. Moreover, Study 2 provided evidence that the effects of age identity were contingent upon travel activity type and intrapersonal travel constraints. The effects of age identity on older travelers' travel intentions were magnified by the lack of intrapersonal constraints. Study 2 results also demonstrate that old influencers could attract more older travelers to visit the destination they recommended by showing challenging activities (vs. relaxing activities) they performed at the destination.

5. Study 3

5.1. Design, stimuli & measures

Study 3 incorporated another manipulated variable, travel companion, to investigate the interaction effect of travel companion and influencer's age cue in addition to the main and mediation effects tested in Study 1. Study 3 also examined the moderation role of interpersonal travel constraints in this mechanism. A 2 (influencer's age cue: old vs. young) × 2 (travel companion: absence vs. presence) between-subjects design was conducted with 199 U.S. older adults (age 55 or older). The participants were recruited via Prolific (https://www.prolific.co/), a crowdsourcing marketplace. Only older U.S. residents who had taken a trip in the past 12 months and used YouTube at least once a week were included in this study. The sample consisted of 50.8% female, 90.5% White (5.5% African American, 3% Hispanic, 0.5% Asian) with an average age of 62.0 (SD = 5.69). The majority of the respondents (88.4%) had some college education. More than half of the respondents (53.3%) had an annual household income over $60k. Over 67% of the respondents take at least two trips a year.

Study 3 designed different scenarios from Study 1 and Study 2. Study 3 used YouTube as the social media platform and road trips as travel mode. The participants were told to imagine that they were making a travel plan and saw a travel influencer's YouTube page with a video thumbnail. They were then randomly assigned to one of the four scenarios: an old male influencer or a young male influencer who shared a video regarding his road trip alone, old couple influencers or young couple influencers who share a video regarding their road trip with friends (See Appendix A). In order to avoid confounding variables that might exist in different videos, the participants were exposed to the preview image of the video only. After reading the assigned scenario, participants were asked to complete a questionnaire. The scales used in Study 3 were the same as Study 1, plus the scale for interpersonal constraints borrowed from Chen and Petrick (2016) and Nyaupane and Andereck (2008) (Appendix B). All scales were found to be reliable (Cronbach's α > 0.7). The mean scores of all constructs were used in subsequent analyses. ANOVA and Process were conducted using SPSS software to test hypotheses.

To test the manipulation of the influencer's age cue, the respondents were asked to indicate whether the influencer pictured in the scenario looked young or old (1 = young, 7 = old). The t-test results indicated that the manipulation of the influencer's age cue was successful M_{old} = 6.05, M_{young} = 2.10, t = 31.55, $p < 0.001$. To test the manipulation of travel companion, the respondents were asked to rate the trip that the influencer performed in the scenario on two items (traveling alone … traveling with others; involve self only … involve others; Su et al., 2020). The t-test results indicated that the manipulation of travel companion also worked as expected ($M_{absence}$ = 1.64, $M_{present}$ = 6.6, t = 43.00, $p < 0.001$).

5.2. Main & interaction effects

An ANOVA was performed to analyze the effects of the influencer's age cue and travel companion on older travelers' travel intention. The results revealed significant main effects of the influencer's age cue (M_{old} = 3.47, M_{young} = 3.05, F = 4.29, p = 0.040) on older travelers' travel intention. Similar to Study 1 and Study 2, old social media influencers (vs. young social media influencers) evoked higher travel intentions among older travelers, supporting H1.

The result also indicated a marginally significant interaction effect between the influencer's age cue and travel companion on older travelers' travel intention (F = 3.05, p = 0.082), supporting H5. Fig. 3 shows that older travelers generated higher travel intention when an old (vs. young) social media influencer shared a trip without companions at a destination (M_{old} = 3.51, M_{young} = 2.71, t = 2.74, p = 0.007). However, when the influencer shared a trip with companions, older travelers did not express any difference in travel intention between an old and a young influencer (t = 0.23, p = 0.822). In other words, older travelers generated higher travel intention when a young social media influencer shared a trip with companions (vs. without companions) at a destination ($M_{absence}$ = 2.71, $M_{present}$ = 3.36, t = 2.16, p = 0.033). However, when it comes to an old social media influencer, older travelers did not express any difference to a trip with or without companions (t = 0.30, p = 0.765).

5.3. Mediating and moderating effects

PROCESS Macro Model 4 was conducted to test the mediating effect of age identity. The results showed that age identity significantly mediated the relationship between the influencer's age cue and older travelers' travel intention (Effect = 0.08, 95% CI [0.00, 0.14]), supporting H2.

PROCESS Macro Model 7 was conducted to test the moderated mediation effect of travel companion and age identity proposed in H6. The results revealed no significant moderated mediation effect (Index =
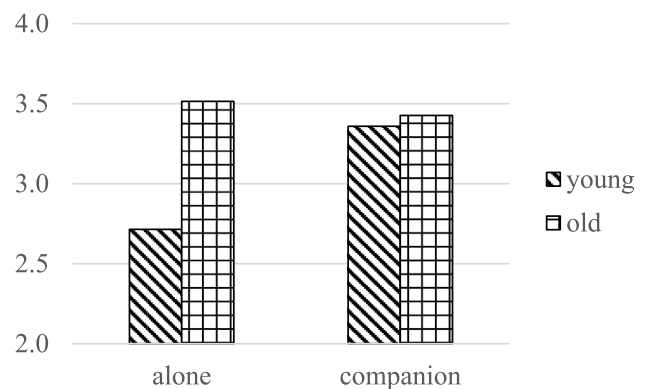
Fig. 3. Interaction effect between influencer's age cue and travel companion.

0.00, 95% CI [−0.05, 0.06]). The conditional indirect effect results did not show any differences in terms of the mediation effects of age identity in both conditions (with vs. without companion). Therefore, H6 was rejected.

Next, PROCESS Macro Model 14 was run to analyze the conditional effects of interpersonal travel constraints proposed in H8. The results showed a significant moderated mediation (Index = 0.06, 95% CI [0.01, 0.13]). As proposed, only when older travelers perceived high interpersonal travel constraints (≥4.09) did age identity show a significant mediation effect between the influencer's age cue and travel intention (Effect = 0.09, 95% CI [0.01, 0.20]). When older travelers perceived low interpersonal travel constraints (≤2.94), there was no significant mediation effect of age identity (Effect = 0.02, 95% CI [−0.02, 0.08]). Thus, H8 was supported.

5.4. Discussion

With a different scenario design, Study 3 results still support H1 and H2 that older travelers are more likely to visit destinations featured by old influencers (vs. young influencers) due to their perceived younger age identities. Moreover, Study 3 findings also provide evidence that the effects of age identity are contingent upon interpersonal travel constraints. The effects of age identity on older travelers' travel intention were magnified by high interpersonal constraints. Study 3 results also demonstrate that old influencers (vs. young ones) could generate a higher level of travel intention among older travelers when they shared travel without companions. However, travel comparison does not moderate the mediation effect of age identity, indicating that older travelers' perceived age don't change whether they were exposed to a solo travel or group travel experience.

6. Discussion and implications

6.1. General discussion

The senior tourism industry is growing, with tourism organizations increasingly recruiting social media influencers as part of marketing strategies (Stončikaitė, 2022). However, the effects of social media marketing on older travelers are still under-researched, let alone in the area of influencer marketing (Zhong et al., 2021). Drawing on the social comparison theory, the present study focuses on older travelers and depicts a complex and comprehensive picture of how influencers' age cue impacts older travelers' travel intention through a dual process of assimilation and contrast. The study also delves into how travel cues (travel activity type and travel companions) and travel constraints pose moderating effects in this mechanism. The hypothesis testing results in three experimental studies are summarized in Table 1.

Overall, the results of this study suggest that older travelers generate

Table 1
Hypothesis testing results.

Hypothesis	Study 1	Study 2	Study 3
H1: age cue → travel intention	Supported	Supported	Supported
H2: age cue → age identity → travel intention	Supported	Supported	Supported
H3: age cue × activity type → travel intention	–	Supported	–
H4: age cue × activity type → age identity → travel intention	–	Rejected	–
H5: age cue × travel companion → travel intention	–	–	Supported
H6: age cue × travel companion → age identity → travel intention	–	–	Rejected
H7: age identity × intrapersonal constraints → travel intention	–	Supported	–
H8: age identity × interpersonal constraints → travel intention	–	–	Supported

a higher level of travel intention when exposed to old influencers (vs young influencers). Such outcomes are derived from two paths. One is the direct effects of old influencers' age cues. Older travelers tend to assimilate and identify with old influencers as travelers perceive they are in a similar age group. Another path is the indirect effects of travelers' age identity. Older travelers feel younger because they tend to have a youthful bias toward themselves when compared to peers of similar ages (Robinson-Whelen & Kiecolt-Glaser, 1997). The findings corroborate the dual process of assimilation and contrast that is likely to arise in social comparison when moderate differences exist between individuals and comparison targets (Brewer, 1991; Collins, 2000). On the one hand, older travelers perceive them as being in a similar group with old influencers because of the selective accessibility mechanism, which suggests that similar age cues highlight other congruent information more accessible cognitively and thus forge a social "we" identity (Mussweiler, 2007). Identification of old influencers motivates travel intention, which is also supported by other literature on consumer behaviors (Cheung et al., 2022; Schouten et al., 2020). On the other hand, at an individual level, older travelers engage in dissimilarity tests within the group to establish their own personal age identity. Consequently, a downward comparison occurs when exposed to old influencers, resulting in old travelers' younger identity, which motivates a higher propensity to travel (Montepare, 2020). In the case of young influencers, stark age differences trigger a unidirectional contrast process. Dissimilarity leads older travelers to view comparison as less relevant, thus decreasing their travel intention. In addition, upward comparison with young influencers renders travelers' older age identity more salient, which further decreases their travel intention. The results also find support in gerontology literature, which shows older identity negatively affects individuals' productive activities and physical functioning (Nagy et al., 2019; Stephan et al., 2013).

To present a more comprehensive view, the study further investigates the moderating effects of travel cues, including travel activity type (challenging vs. relaxing) and travel companions (presence vs. absence). The results show that old influencers (vs. young ones) have greater impacts on older travelers' travel intention when they share challenging activities and solo travel experiences. This is attributed to the perception that such travel scenarios entail more risk, uncertainty, and effort demanded (Kazeminia et al., 2015; Liu et al., 2023; Su et al., 2020). In this case, older travelers are more inclined to engage in comparison with similar others to assess one's own ability. These findings align with the fundamental premise of Festinger's (1954) original theory on social comparison, known as the similarity hypothesis, which posits that people seek comparison with similar others to attain accurate and stable self-evaluation. Interestingly, when it comes to a shared trip with companions, older travelers consistently express high travel intentions, no matter whether an old influencer or a young influencer shares it. This finding aligns with previous literature on intergenerational interactions, suggesting that older individuals enjoy interacting not only with their peers but also with younger generations (e.g., Hernandez & Gonzalez, 2008; Zhong et al., 2023).

The results further reveal that the mediation effect of age identity intensifies when influencers share challenging activities (vs. relaxing). This observation supports prior research findings that older adults feel younger when engaging in physically challenging activities (Chua et al., 1990; Stephan et al., 2013) and are more likely to alter their behavior in response to these activities compared to relaxing ones (Szymczak et al., 2020). However, whether influencers travel with companions does not significantly alter older travelers' perceived age identity. This phenomenon may result from the balanced effects of increased physical confidence associated with solo travel and enhanced social interactions linked with group travel. While solo travel might lead to perceptions of being younger due to independence and self-reliance (Covinsky, 2013; Ennis et al., 2014), engaging in social interactions during group travel has been connected with feeling younger (Seeman et al., 2001). Therefore, older travelers' age identity perceptions might remain unchanged

due to these opposing influences.

Moreover, the results show that the mediation role of age identity is conditioned by both intrapersonal and interpersonal travel constraints. In particular, the mediation effect of age identity between the influencer's age cue and travel intention was significant only when older travelers perceived low intrapersonal travel constraints. However, for those with high intrapersonal travel constraints, this effect is not significant. The empirical findings support the significant role of intrapersonal constraints play in shaping older people's leisure preferences and participation (Kazeminia et al., 2015), aligning with previous studies highlighting the negative effects of intrapersonal constraints on leisure intention among older individuals (Son et al., 2008). Furthermore, the study reveals that interpersonal travel constraints have a contrasting moderation effect when compared to intrapersonal constraints, as age identity's impact on older travelers' travel intention is amplified in the presence of greater interpersonal constraints. These results provide evidence for Crawford et al.'s (1991) hierarchical leisure constraints model, suggesting that diverse types of leisure constraints act in a hierarchical manner and exert distinct effects on leisure participation.

6.2. Theoretical implications

The current research makes four major contributions to the existing body of knowledge within the realm of influencer marketing and older consumer behavior. First, it addresses the underrepresentation of the older consumer group in existing influencer studies (Belanche et al., 2021; Cheung et al., 2022). Unlike most research emphasizing influencers' general attributes like attractiveness (Vrontis et al., 2021), this study focuses on specific characteristics, namely age. This is the first attempt to depict the intricate psychological mechanism related to age comparison that underlies the decision-making of older travelers. Filling these gaps is crucial given the growing senior tourism market, the increased use of influencer marketing within the hospitality and tourism industry, and the rising engagement and impact of older influencers (Bokunewicz & Shulman, 2017; Köttl et al., 2022; Patterson et al., 2017). Age is a highly visible personal trait and a social cue that has unique implications for older people due to age-related stereotype threats (Levy & Banaji, 2002). This study not only enhances understanding of how age cues affect older travelers' decision-making but also broadens the applicability of influencer marketing across diverse age groups.

Second, this study serves as the first study in tourism to reconcile conflicting findings on older consumer behaviors and influencer marketing based on social comparison theory. Social comparison theory (Festinger, 1954; Suls et al., 2000) includes different directions of comparison (i.e., assimilation and contrast) and the potential concurrence of both directions, resulting in a composite identity (Brewer, 1991; Collins, 2000; Stapel & Koomen, 2001). Research on consumer behavior typically focuses on contrast comparison processes: upward and downward (e.g., Levy & Banaji, 2002; Stephan et al., 2013, 2015). However, the intricate social comparison processes involving concurrent assimilation and contrast, which are less commonly addressed in existing literature, help explain conflicting perspectives from research on older consumer behavior and influencer marketing. The study results provide empirical evidence for the power and flexibility of social comparison theory in explaining complex phenomena and its potential to reconcile different theoretical perspectives. The study offers a unique theoretical perspective in understanding travel decision-making by considering the concurrent processes of assimilation and contrast in social comparison.

Third, by incorporating moderators such as travel cues (activity type and travel companions), this study comprehensively shows how influencers' age cues affect older travelers' travel intentions within these contexts. Influencers' sharing of activity types and travel companions serves as travel-related information cues for older travelers to gauge perceived risks and demands associated with such travel. This inference

affects the perceived need for social comparison in assessing their subjective age, capabilities, and likelihood of success in similar activities. Most previous studies typically regard tourism activities and travel companions as integral components of travelers' personal experiences, exploring their influences on shaping travelers' overall experience (Liu et al., 2023; Su et al., 2020, 2021). However, this study delves into the unexplored roles of tourism activities and travel companions as social cues derived from others, which impact travelers' travel intentions. This study also demonstrates the versatility of social comparison theory, effectively applying it to account for diverse contextual information.

Lastly, this study integrates social comparison theory with the hierarchical leisure constraints model to enrich the understanding of older travelers' responses to influencer marketing. This integration is anchored in the unique characteristics of older travelers, whose travel constraints are associated with declined abilities and the loss of companions common in later life. Including the hierarchical leisure constraints model strengthens the research framework, initially built on social comparison theory. The hierarchical leisure constraints model has been used to explain how constraints directly influence leisure participation or preference (Crawford et al., 1991; Godbey et al., 2010; Son et al., 2008). However, few studies have extended constraint research to explore online and digital environments (Valtchanov & Parry, 2017). Therefore, this study extends the application of the hierarchical leisure constraints model by examining the moderating role of intrapersonal and interpersonal leisure constraints on the mediation effect of age identity. The study results illustrate the intricate interplay between travel constraints and age-related cues in targeting older travelers.

6.3. Practical implications

The findings offer novel insights into the strategies of influencer marketing in the senior tourism industry. Firstly, when running influencer endorsement campaigns targeting older travelers, travel managers should select influencers with similar age cues (i.e., old influencers) and recognize the role of age identity. The study results show that age cues of old influencers stimulate group similarity and younger age identity among older travelers, leading them to be more motivated to follow the influencers' advice and make favorable travel decisions. Therefore, selecting old influencers should be a priority to attract older travelers. Moreover, by acknowledging the mediating role of age identity, marketers can tailor the post content to promote a positive age identity and make old people feel younger, ultimately boosting their intention to travel.

Additionally, the results reveal moderating effects of activity type and travel companions. The findings offer valuable and specific insights for destination marketing organizations to optimize their influencer marketing strategies. Sharing content about challenging activities featuring old influencers can greatly increase older travelers' intention to visit the endorsed destinations. For example, beach destinations could showcase old influencers actively participating in surfing, parasailing, kayaking, or scuba diving. Mountain destinations could feature old influencers engaging in activities such as hiking, biking, or rock climbing. Furthermore, when social media posts by old influencers depict solo travel, they elicit a heightened level of travel intention among older travelers. Therefore, when crafting marketing campaigns targeting older travelers, the inclusion of old influencers undertaking solo travel or engaging in challenging activities should be carefully considered.

Lastly, the results suggest that the impact of age identity on travel intention is contingent upon two types of travel constraints. Specifically, a younger age identity resulting from comparison with old influencers is more effective in increasing travel intention when old travelers face fewer intrapersonal constraints or more interpersonal constraints. Therefore, practitioners should strive to understand their target older audience's travel constraints comprehensively, and strategically align their endorsement content to attract the intended population. To be specific, for older travelers with low intrapersonal constraints and high

interpersonal constraints, emphasizing travel experiences of old influencers can be particularly effective because it evokes a sense of youthfulness among older travelers and enhances their travel intention.

6.4. Limitations and future studies

Several limitations exist in the present study. First, the study samples were collected only from older U.S. travelers. It is worth noting that cultural differences may affect older people's reactions to social media influencer marketing. Thus, future research may retest this research framework with older traveler samples in other countries, especially older travelers in Asian countries. Second, the current research identified older travelers as aged 55 or older. There is no universal standard threshold age at which to be considered as an older adult. As older age threshold may impact the study results, future studies may compare this study with different age thresholds such as 65 or 70 years old. In addition, older people are not a homogeneous group, and they may differ greatly in terms of other characteristics such as physical state, health condition, personality, gender, income, education level, and other factors. How older travelers' age interacts with these individual characteristics and affects their comparison process and travel decision can be a fruitful future research direction. Second, the current study only utilized a social media post with pictures and textual content as stimuli. To improve the future external validity, researchers could consider strategies to enhance the information richness of the scenarios. For instance, they could diversify the content types (i.e., image, video, story, caption) in the scenarios or extend the study duration to analyze followers' attitudes or behavioral trends toward influencers and their multiple posts. Third, this study employed travel intention as a proxy of the actual travel behavior in response to influencer marketing. Future studies could examine old followers' actual travel behaviors by analyzing real data that shows the conversion rate or travel website traffic to gain more concrete insights into the real-life impact of travel influencer marketing on older travelers' travel choices and actions. Lastly, this study evaluates the mediating role of age identity in influencing older travelers' intentions, grounded in theoretical underpinnings. Future research could explore alternative pathways or roles of age identity (e.g., as moderator as preexisting personal trait) in affecting older travelers' travel decision-making.

Impact statement

The study explores older travelers' reactions to travel influencers on social media and reveals that older travelers prefer old travel influencers to young ones. The findings are influential to the wider society as it shows that what influencers post on social media could contribute to older people's successful aging, especially when the activity is challenging and social-related. The study findings may increase life satisfaction and well-being of the society by suggesting destinations to endorse more old influencers (grandfluencers) and encourage them to pursue more challenging and social activities. When older people share more positive images to the public, it dispels the physically incompetent and socially isolated negative stereotype associated with older people, thereby embracing a successful aging society.

CRediT authorship contribution statement

Xi Y. Leung: Writing – review & editing, Writing – original draft, Methodology, Funding acquisition, Formal analysis, Data curation, Conceptualization. **YunYing Susan Zhong:** Writing – review & editing, Writing – original draft, Conceptualization. **Jie Sun:** Writing – review & editing, Writing – original draft, Conceptualization.

Declarations of interest

None.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.tourman.2024.104979.

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