



Interpretive structural modeling of the influential influence of social media on sports tourist behavior

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ABSTRACT

Objective: Social media influencers play a key role in shaping the behavior of sports tourists and influencing their travel decisions by producing persuasive content. The aim of this study was to construct an interpretive structural modeling of influence of social media influencers on sports tourist behavior.

Method: This research was applied in terms of purpose and mixed (qualitative-quantitative) in terms of methodology. In the qualitative part, content analysis was used, and in the quantitative part, interpretive structural modeling was used. The participants in the qualitative part included sports tourists and followers of social media influencers in the field of sports, who were selected using a purposive sampling method and a snowball strategy. Based on theoretical saturation, 15 semi-structured interviews were conducted. In the quantitative section, participants included faculty members, managers of tourism companies, members of sports tourism committees, and startup activists, of whom 10 were purposefully selected. Semi-structured interviews were used in the qualitative section and a 12×12 square matrix in the quantitative section to collect data. The assessment of validity and reliability in the qualitative section was carried out with strategies such as believability, transferability, confirmability, and process audit study, and in the quantitative section, face validity and Cohen's kappa index were used.

Findings: Qualitative findings led to the extraction of 57 sub-themes within 12 main themes (audience behavioral expectations, travel-related job behavioral expectations, conveying a favorable destination image to the audience, arousal, audience behavioral tendencies, audience relationship, pervasive cyberspace, audience decision-making assistance, information quality, content quality, influencer influence, and influencer characteristics). Quantitative findings showed that the hierarchical model consists of five levels; "audience behavioral tendencies" is at the highest level, and "pervasive cyberspace" and "influencer characteristics" are at the lowest level. Other factors played a mediating role.

Results: The results of the MiQMaQ analysis showed that all factors are in an integrated and correlated structure and none can act independently. The findings of this study indicate that the impact of social media influencers on sports tourist behavior can be explained within the framework of a multilevel model, in which interactions between independent, mediating, and dependent factors play a key role.

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Introduction

In recent decades, the use of the Internet among the people has increased (Höjerström & Jonsson, 2024). In 1403, 67.79 percent of the Iranian population used the Internet, which is a significant change compared to 1390 when only 6.43 percent used the Internet (Ministry of Communications and Information Technology, 2024). This significant change has occurred due to three reasons: the spread of high-speed Internet, the mobile revolution, and social media (Höjerström & Jonsson, 2024).

According to Zhang et al (2024), people use social media for everything. This platform has grown at a remarkable rate and will continue to grow. Hussain et al (2024) explain that with this great growth, social media has a major impact on tourists' behavior and they show less interest in using traditional media.

With the increasing use of social media, the sports tourism industry is also growing (Yuliandari, M., & Anom, 2024). Sports tourism marketing requires the use of sports and the host destination to optimize the quality of sports tourist experiences. (Ghorbanpoor & Azimzadeh, 2022) According to a report by Technov Market Research, the global sports tourism market will reach \$771.4 billion between 2024 and 2029, at a compound annual growth rate of 15.2% (Yan & Huan, 2024). The tourism industry has grown significantly in the 21st century and has a significant contribution to the GDP and economic growth of countries. (Alidoost Qahfarkhi, 2023) High economic readiness can facilitate participation in the development of sports in society (Mohammadi torkamani et al, 2021).

The use of social media is one of the main drivers of this remarkable growth (Yan & Huan, 2024). With their modern and audience-friendly forms, they are the largest and most effective means of producing concepts, social proportions, and generally messengers of culture in societies, which can play an important role in paving the way for the expansion or stagnation of sports tourism-related activities, because they are able to shape the thoughts of the people of a society and direct their behavior in a desired way (Alizadeh and Nasiri, 2022).

Social media has evolved significantly since its inception, from a platform for individuals to interact with their personal network to a platform where individuals can influence the opinions, behaviors, and consumer preferences of their followers (Höjerström & Jonsson, 2024). Platforms such as Instagram and later TikTok have enabled their users to produce and share content, allowing individuals to build and engage with a community of followers (Leung et al., 2022). This has led to a change in the way the Internet is used as a means of communication, a decrease in media concentration, specialization of channels, market segmentation to target specific audiences, and the emergence of the phenomenon of social media influencers (Santateresa-Bernat et al., 2023).

Social media influencers are people who have gained credibility and a large following on digital platforms by sharing content related to their specific interests or expertise. They connect with audiences through platforms such as Instagram, YouTube, TikTok, and Twitter and influence the opinions, behaviors, and purchasing decisions of their followers (Bakker, 2018).

They are often categorized into six categories based on the number of followers they have: nano-influencers (1,000 to 10,000 followers), micro-influencers (10,000 to 50,000 followers), mid-level influencers (50,000 to 500,000 followers), macro-influencers (500,000 to 1,000,000 followers), mega-influencers (1,000,000 to 5,000,000 followers), and celebrities (more than 5,000,000 followers) (Prabhu & Patil, 2023).

Influencers are experts in various fields such as travel, and their authentic content and personal interaction with followers make them valuable partners for tourism businesses looking to reach their target audience. This is because social media influencers create valuable content, are well-known in specific fields, and are followed by a number of users on social media (Lou & Yuan, 2019). With their expertise and social appeal, they are followed by people with similar interests (Djafarova & Rushworth, 2017) and can influence the beliefs, attitudes, and behaviors of their followers (Schoutene et al., 2021).

Digital marketing, viral marketing, and influencer marketing are new marketing methods that should be used well alongside traditional methods. (Faghir Ganji et al., 2021) The influencer marketing literature has used its congruence theory to explain the impact of influencers on individual behavior, specifying that individuals adhere to the values of influencers and transfer these values to themselves to build, maintain, and improve their ideal self-concept (Xu & Pratt, 2018). At a high level of congruence, followers tend to resemble influencers (Campbell & Farrell, 2020) and evaluate what is endorsed by influencers as matching their ideal self (Belanche et al., 2021).

Previous studies have reported several reasons for the influence of influencers on people's behavior. For example, Rezaei and Zarepour Nasirabadi (2024) showed in their study that the characteristics of influencers, such as physical and social attractiveness, trustworthiness, and perceived expertise, along with the quality of their page content, have a significant effect on the behavioral intentions and purchase intentions of followers on the social media platform Instagram. This study also emphasized that meta-social relationships and social interaction play an important role in shaping the flow state and satisfaction with Instagram pages. Movahednia et al (2024) also examined the effect of influencer characteristics on purchase intentions in social media marketing with the mediating roles of personality and brand attitude. The results of this study showed that the physical attractiveness of influencers had the greatest impact on brand attitude, while trustworthiness had the least impact on customers' purchase intention. In this regard, Zahabi et al (2023) showed in another study that the level of customer engagement with influencers on Instagram social media has a positive impact on the willingness to travel to the advertised destination, attitude towards the brand, and purchase intention. Akbari et al (2023) also investigated the characteristics of influencers on social media and purchase intention to explain the role of trust and satisfaction with image. Their results showed that satisfaction with image mediates the effects of expertise, physical attractiveness, and homogeneity on purchase intention. However, the effect of credibility on satisfaction with image was not confirmed.

In addition, Kılıç et al (2024) in a study based on cognitive response theory and examining the effect of content produced by travel influencers on followers' intentions to participate in volunteer tourism found that informing about volunteer tourism activities in the content of these influencers positively affects the sense of responsibility, information quality, and curiosity of followers. The results showed that these factors directly contribute to creating positive emotions in the audience and ultimately strengthen their intention to participate in volunteer tourism. In another study, Hernández-Méndez & Baute-Díaz (2024) analyzed the role of influencers in Instagram users' travel decisions and showed that the relationship between attitude towards the post and attitude towards the destination is of particular importance. Omeish et al (2024) also showed that influencer marketing has a positive and significant effect on destination image and visit intention by examining the effect of influencer content on key outcomes related to tourism destinations. The findings indicated that awareness/interest and trust/engagement had the greatest impact. Also, content quality predicted visit intention by informing decision-making, and perceived credibility made influencer recommendations appear more persuasive. In addition, social media intensity acted as a moderating variable, amplifying these effects among more active social media users. Finally, Manthiou et al (2024) acknowledged that the rapid growth of the social media influencer industry has provided unprecedented opportunities for the tourism industry to engage and connect with travelers, and defined a construct for travel influencers and identified five key dimensions: inspiration, authenticity, attractiveness, content expertise, and trustworthiness. These dimensions suggest that travel influencers can play an effective role in attracting audiences and motivating them to engage more with tourism destinations by using these characteristics.

These studies generally highlight the significant effects of social media influencers on audience behavior, including purchase intentions, travel intentions, and interactions related to tourism destinations. Research has shown that characteristics such as physical attractiveness, social appeal, and content expertise, along with the quality of the content provided and audience trust, play a key role in shaping behavioral intentions. Also, factors such as accurate information, creating a sense of responsibility, and emotional interactions can directly influence audience attitudes towards a brand or destination. However, these studies have mainly focused on the characteristics of influencers and have not addressed the exact reasons for how these characteristics are influential. Also, a specific segment of tourism, especially sports tourism, has received less attention. While the role of influencer marketing in improving destination image and initial interactions has been confirmed, a deeper investigation of the communication mechanisms and the role of two-way interactions between influencers and audiences, especially in more specialized areas such as sports tourism, seems necessary. Therefore, future research should elucidate the precise mechanisms of influencer influence and examine less studied areas such as sports tourism in more depth in order to develop more comprehensive marketing strategies for effective interaction with audiences.

Despite the increasing importance of influencers in social media and their key role in shaping audience behavior, especially in the field of sports tourism, no comprehensive and structural

model has been presented to fully explain the complexities and multiple dimensions of their influence on sports tourism behavior. Analyzing this influence, which includes complex interactions between the characteristics of the influencer, the content produced, the characteristics of the audience, and the social media context, is not possible using simple descriptive or correlational methods and requires a comprehensive and multi-level approach. This research gap is especially evident in Iran; the lack of robust and up-to-date data, along with the absence of a coherent theoretical framework that can clearly explain the cause-and-effect relationships between the variables involved in this process, has made effective planning and policymaking in the field of utilizing the capacity of influencers for the development of sports tourism difficult.

Furthermore, social media is recognized globally as a key tool for attracting sports tourists and motivating them to participate in activities, but Iran has not been able to effectively use social media influencers to develop sports tourism. Limited and scattered activities in this area indicate a lack of specific and targeted strategies. While influencers can play an effective role in attracting sports tourists, there is still no accurate understanding in Iran of the impact of influencer characteristics, the quality of their content, and audience interactions with this content on sports tourist behavior.

These problems and challenges, along with the inherent complexities of analyzing the effects of influencers on sports tourist behavior, highlight the need for comprehensive and structured research to identify influential factors, model the relationships between variables, and provide solutions to improve the state of sports tourism in Iran. Therefore, this study seeks to answer the question of what factors influence social media influencers on sports tourist behavior and how these effects can be analyzed in the form of an interpretive structural model?

Method

This study is applied in terms of purpose and mixed (qualitative-quantitative) in terms of method. In the qualitative part, the research approach is based on content analysis, and the quantitative part includes interpretive structural modeling, which is one of the common methods in the field of operations research and is used to identify and analyze relationships between complex elements (Sorooshian et al, 2023). The participants of this study in the qualitative part were sports tourists and followers of social media influencers in the field of sports. The purposive sampling method and its strategy were snowball type, and 15 interviews were conducted according to theoretical saturation. The selection criteria for these individuals included experience of direct interaction with social media influencers, participation in sports tourism activities, diversity in age, gender, and sports tourism background. In the quantitative section, the participants included university faculty members, tourism company managers, members of sports tourism committees, and startup activists in the field of sports tourism. The selection criteria for these individuals included expertise in the field of sports tourism, academic expertise, and management or operational experience with social media influencers, and 10 of them were purposively selected (Attri, Dev & Sharma, 2013; Mandal & Deshmukh, 1994).

Semi-structured interviews were used to collect data in the qualitative part. The interview questions were organized in two parts. The first part was related to demographic questions and the second part was dedicated to specialized questions. For example, what is your definition of a social media influencer? What role do social media influencers play in changing your behavior? What characteristics and behaviors of these people most influence you and why? In the quantitative part, a 12×12 square matrix was used.

To assess the validity and reliability of the results in the qualitative section, the strategies of credibility, transferability, confirmability, and process audit study were used. To increase credibility, the research process was reviewed and confirmed by 3 university professors with expertise in sports tourism, and two independent coders were used to code several interview samples. In line with transferability, the opinions of three independent experts who did not participate in the research were obtained to ensure that the findings were generalizable to similar fields. In order to ensure confirmability, all interviews were fully recorded and recorded. In addition, in the process audit study, the research information was provided to 3 participants and the accuracy of the analyses was confirmed. Also, to assess the reliability of the codings, two interviews were coded by the researcher and another analyst, and the agreement rate in similar and dissimilar codes was 91%. In the quantitative section, face validity and the inter-rater agreement reliability index were used to evaluate the square matrix whose dimensions were 12×12. The Cohen's kappa coefficient obtained was 0.78, indicating considerable agreement between experts (Landis & Koch, 1977). According to Landis & Koch (1997), kappa values between 0.61 and 0.80 indicate substantial agreement. Therefore, it can be concluded that the final structural self-interaction matrix has acceptable reliability. To assess the validity and reliability of the results in the qualitative section, the strategies of credibility, transferability, confirmability, and process audit study were used. Qualitative data were collected between August 2013 and January 2013. Participants were asked to participate in semi-structured interviews. Social networks were used to collect data, because the temporal and spatial flexibility offered by these networks is generally beneficial to qualitative research, allowing researchers to access diverse and geographically dispersed populations that are not easily accessible (Stewart & Williams, 2005). Upon completion of the qualitative section, a 12×12 square matrix was prepared based on the main themes and sent to the initial participants to examine the relationships. The relationship measurement method was based on four symbols (O, X, A, V). This means that if factor i had an effect on factor j, the symbol V was used. If factor i was influenced by factor j, the symbol A was used. Also, if factors i and j had an effect on each other, the symbol X was used, and if they did not, the symbol O was used. For qualitative data analysis, the Braun & Clarke (2006) coding guideline was used, which has two main stages: primary coding and focused coding. Also, the interpretive structural modeling method was used to analyze the data, and the Excel 2021 macro was used to perform this analysis.

Research Findings

Table 1 shows the demographic characteristics of the participants in the qualitative part of the study. Of the 15 participants, 8 were female and 7 were male. The average age of the participants was 34 years, and the age range was 25 to 45 years. Their sports tourism experience ranged from 4 to 15 years, with an average of 8 years, indicating relative experience in the field of sports tourism. In terms of education level, the largest number of participants had a master's degree (7 people), and the rest had diploma, bachelor's, and doctoral degrees. The type of participation in sports tourism was also diverse and included participation in friendly sports tours, attendance at mountain sports competitions, participation in winter sports events, and adventure activities.

Table 1. Demographic characteristics of qualitative participants

Row	Gender	Age (years)	Tourism experience	Education level	Type of participation in sports tourism
1	Woman	28	7	Bachelor's degree	Participate in/ friendly sports tours
2	Man	35	10	Master's degree	Adventure tourism
3	Woman	40	6	Bachelor's degree	Attending water sports educational and recreational camps
4	Man	32	8	Master's degree	Participate / infriendly sports tours
5	Woman	29	12	Bachelor's degree	Participating in mountain sports competitions
6	Woman	45	8	Master's degree	Participation in recreational and professional mountaineering tours
7	Man	38	15	Bachelor's degree	Participation in cultural / sports events such as indigenous games
8	Woman	42	5	PhD	Sports tour operator
9	Man	33	6	Master's degree	Participating in winter sports events such as skiing
10	Woman	30	4	Diploma	Participating / in family sports tours
11	Man	25	9	Bachelor's degree	Experience / destination-specific sporting activities
12	Woman	37	10	Master's degree	Participate In/ friendly sports tours
13	Man	41	7	Master's degree	Adventure tourism
14	Woman	31	12	Bachelor's degree	Participation in recreational and professional mountaineering tours
15	Man	39	7	PhD	Travel related to national and international sporting events

Table 2 shows the demographic characteristics of the participants in the quantitative part of the study. Of the 10 participants in the quantitative part, 7 were male and 3 were female. The average age of these individuals was 42 years, and their age range was between 36 and 52 years. The participants' work experience ranged from 10 to 23 years, with an average of 16 years. In terms of education level, 5 had a master's degree and 3 had a doctorate. The participants' fields of activity were also diverse, including roles such as heads of tourism associations, university

faculty members, officials and experts in sports tourism committees, managers of nature and tourism companies, and startup activists in this field.

Table 2. Demographic characteristics of quantitative section participants

Row	Gender	Age (years)	Work history	Education level	Field of activity
1	Man	46	17	Master's degree	President of the West Azerbaijan Sports Tourism Association
2	Man	38	10	PhD	Member of / Ardabil Sports Tourism Committee
3	Woman	46	23	PhD	University faculty
4	Man	42	18	Master's degree	Sports Tourism Officer, Domestic Tourism Development Office
5	Woman	51	19	PhD	University faculty
6	Man	39	18	Master's degree	Head of / Golestan Tourism Development Group
7	Woman	36	14	Master's degree	Sports tourism activist, tour leader, / and tourism startups
8	Man	52	21	Master's degree	Managing Director of Nature and Tourism Company
9	Man	37	13	Master's degree	Employee of the Sports Tourism Committee of the Ministry of Cultural Heritage and ...
10	Man	37	12	PhD	Startup / activist in the field of sports tourism

Table 3 presents the results of the qualitative analysis of the interview transcripts. Based on the coding process, 57 sub-themes were identified, which were categorized into 12 higher-level abstract concepts and determined as main themes. These themes included audience behavioral expectations, travel-related job behavioral expectations, conveying a desired destination image to the audience, arousal, audience behavioral tendencies, audience relationships, pervasive cyberspace, helping the audience make decisions, information quality, content quality, influencer influence, and influencer characteristics.

Table 3. Sub-themes and main themes related to the impact of social media influencers on sports tourist behavior

Main themes	Sub-themes	Interview code
Audience behavioral expectations (C ₁)	Audience belief in influencer / recommendations	P1, P12
	Social demand	P1, P12, P15
	Influencers being role models / for audiences	P2, P5, P10
	Audience / willingness to imitate popular influencers	P9, P11, P14
Behavioral expectations for travel-related jobs (C ₂)	Easy introduction of tourist destinations	P6, P11
	Collaboration / of tour operators and travel-related businesses with influencers	P7, P13, P14
	Reaching a wider market	P2, P5, P10, P12
	Getting noticed /	P3, P12, P14
	Educating followers on how / to travel	P4
	Cost-effectiveness of advertising	P1, P2, P3, P6, P10, P13, P14, P15
	of advertising	P4, P12
All-encompassing cyberspace (C ₃)	The increasing use of / social networks	P11, P12, P13, P14, P15
	Access to a larger audience	P10, P11
	Searching for tourist / destinations in cyberspace	P9, P13

Main themes	Sub-themes	Interview code
Influencer characteristics (C ₄)	High follower rates in / cyberspace	P5
	The impact of the Internet / and cyberspace on advertising	P9, P15
	Credibility	P9, P10
	Wide connections	P6, P8
	Influencer reputation	P7, P11
	Expertise	P7
	Commitment to your followers	P1, P7, P8, P11
	Knowledge	P10, P13
	Impartiality and fairness	P2, P4, P7, P14, P15
	Influencer work fit	P4, P13, P14
Information quality (C ₅)	Social activity	P10, P12
	Emphasize the authenticity of / advertising and content	P8
	Share people's personal / and real experiences	P3, P4, P9
	Provide specialized and technical / information	P2
Content quality (C ₆)	Create high-quality posts	P7
	Creating unique content	P7
	Producing eye-catching content	P13, P15
	Providing high-quality content	P14
Influencer influence (C ₇)	Attracting target audiences	P9, P10
	Attracting audience trust	P4, P11
	High audience adherence to / influencers	P4
	Transmitting thoughts and / feelings to target audiences	P12, P13
	High influence of / influencers on social networks	P13
	Influencer follower communities	P13
To arouse (C ₈)	Encourage followers / to gain new experiences	P13
	Stir up the passion for / travel among followers	P1, P4, P6, P15
	Identify suitable destinations	P10, P14
Helping the audience make decisions (C ₉)	Better introduce the destination	P1, P12, P14, P15
	Provide destination information to / the audience	P4, P6, P13
	Identify the audience's wants / and needs	P4, P14
	Improve consumer awareness	P10
	Increase awareness of the destination	P8, P9
	Direct communication with target / audience	P2,
Relationship with the audience (C ₁₀)	Establishing a friendly relationship with the audience	P5, P11, P12
	Highlighting the role of the / audience	P1
	Reviewing audience opinions / and feedback	P1, P4, P5, P6, P12, P13, P14
	Interacting with the audience	P1, P4, P10
Conveying the desired image of the destination to the audience (C ₁₁)	Audience's positive attitude / towards the destination	P3, P5, P8
	Creating a desirable / destination image in the audience's mind	P8, P11
	Attracting an audience to a / specific destination	P12, P15
Audience behavioral tendencies (C ₁₂)	Attracting new tourists	P3, P9
	Word of mouth advertising in/ cyberspace	P10, P14
	Revisiting the destination	P3, P12, P14

Table 4 shows the structural self-interaction matrix. Based on this table, it can be seen that the factor “Audience Behavioral Expectation (C1)” is influenced by the factor “Comprehensive

Virtual Space (C3)”. Therefore, the relationship of these factors with “A” is shown for input (1, 3) in the structural self-interaction matrix. While the factor “Audience Behavioral Expectation (C1)” is effective on “Information Quality (C5)”. Therefore, the relationship “V” is assigned for input (1, 5) in the structural self-interaction matrix.

Table 4. Structural self-interaction matrix

Agent	Reagent	C ₂	C ₃	C ₄	C ₅	C ₆	C ₇	C ₈	C ₉	C ₁₀	C ₁₁	C ₁₂
Audience behavioral / expectations	C ₁	X	A	A	V	V	O	O	V	V	O	O
Behavioral / expectations for travel-related jobs	C ₂		A	A	V	V	O	O	V	V	O	O
All-encompassing / cyberspace	C ₃			X	O	O	O	O	O	O	O	O
Influencer / characteristics	C ₄				O	O	O	O	O	O	O	O
Information quality	C ₅					X	V	V	X	X	V	O
Content quality	C ₆						V	V	X	X	V	O
Influencer influence	C ₇							X	A	A	X	V
To arouse	C ₈								A	A	X	V
Helping the / audience make decisions	C ₉									X	V	O
Relationship with the / audience	T ₁₀										V	O
Conveying the desired image of the destination to the audience	C ₁₁											V
Audience behavioral / tendencies	C ₁₂											

With the structural self-interaction matrix determined, the symbols (O, X, A, V) were converted into a two-by-two matrix (i.e., 1T and 0T), which is called the initial access matrix. The rules for converting symbols to binary digits were as follows:

If the entry (i, j) in the structural self-interaction matrix is V, the entry (i, j) in the access matrix will be 1 and the entry (j, i) will be zero.

If the entry (i, j) in the structural self-interaction matrix is A, the entry (i, j) in the access matrix will be zero and the entry (j, i) will be 1.

If the entry (i, j) in the structural self-interaction matrix is X, the entry (i, j) in the access matrix will be 1 and the entry (j, i) will be 1.

If the entry (i, j) in the structural self-interaction matrix is O, the entry (i, j) in the access matrix will be zero and the entry (j, i) will be zero.

"Based on the above rules, the relationship symbols for all factors in the structural self-interaction matrix were completely converted to binary numbers 0 and 1 (according to Table 5).

Table 5. Initial Access Matrix

Agent /	C ₁	C ₂	C ₃	C ₄	C ₅	C ₆	C ₇	C ₈	C ₉	C ₁₀	C ₁₁	C ₁₂	Penetration power
C ₁	1	1	0	0	1	1	0	0	1	1	0	0	6
C ₂	1	1	0	0	1	1	0	0	1	1	0	0	6
C ₃	1	1	1	1	0	0	0	0	0	0	0	0	4
C ₄	1	1	1	1	0	0	0	0	0	0	0	0	4
C ₅	0	0	0	0	1	1	1	1	1	1	1	0	7
C ₆	0	0	0	0	1	1	1	1	1	1	1	0	7
C ₇	0	0	0	0	0	0	1	1	0	0	1	1	4
C ₈	0	0	0	0	0	0	1	1	0	0	1	1	4
C ₉	0	0	0	0	1	1	1	1	1	1	1	0	7
T ₁₀	0	0	0	0	1	1	1	1	1	1	1	0	7
C ₁₁	0	0	0	0	0	0	1	1	0	0	1	1	4
C ₁₂	0	0	0	0	0	0	0	0	0	0	0	1	1
Dependency power	4	4	2	2	6	6	7	7	6	6	7	4	

In Table 6, the final access matrix was calculated by incorporating transferability. Transferability means a relationship in which if variable A is related to B and B to C, then A is necessarily related to C. Transferability was measured using power-regression analysis.

Table 6. Final Access Matrix

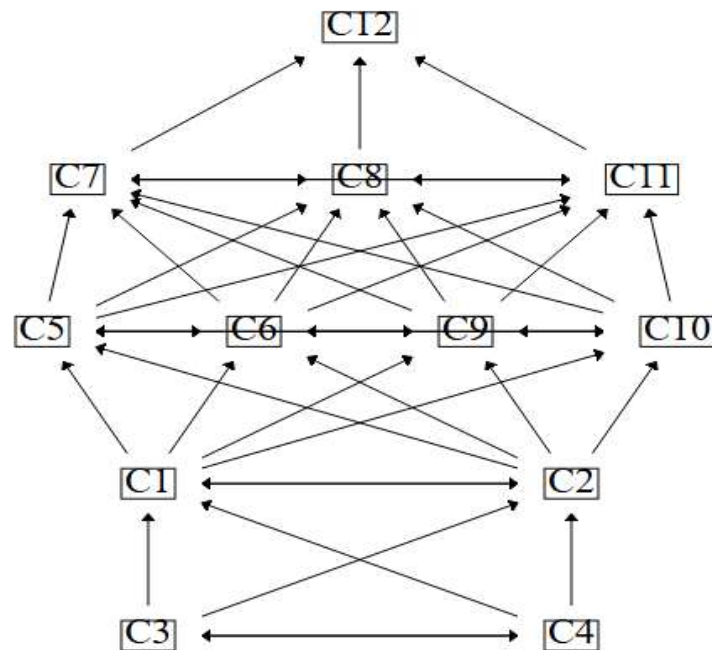
Agent	C ₁	C ₂	C ₃	C ₄	C ₅	C ₆	C ₇	C ₈	C ₉	C ₁₀	C ₁₁	C ₁₂	Penetration power
C ₁	1	1	0	0	1	1	*1	*1	1	1	*1	*1	10
C ₂	1	1	0	0	1	1	*1	*1	1	1	*1	*1	10
C ₃	1	1	1	1	*1	*1	*1	*1	*1	*1	*1	*1	12
C ₄	1	1	1	1	*1	*1	*1	*1	*1	*1	*1	*1	12
C ₅	0	0	0	0	1	1	1	1	1	1	1	*1	8
C ₆	0	0	0	0	1	1	1	1	1	1	1	*1	8
C ₇	0	0	0	0	0	0	1	1	0	0	1	1	4
C ₈	0	0	0	0	0	0	1	1	0	0	1	1	4
C ₉	0	0	0	0	1	1	1	1	1	1	1	*1	8
T ₁₀	0	0	0	0	1	1	1	1	1	1	1	*1	8
C ₁₁	0	0	0	0	0	0	1	1	0	0	1	1	4
C ₁₂	0	0	0	0	0	0	0	0	0	0	0	1	1
Dependency power	4	4	2	2	8	8	11	11	8	8	11	12	

In the accessibility matrix, each factor has a dependency set and an influence set. Then, to determine the level of each factor, leveling is performed and a conical matrix is generated. The commonality between factors is determined based on the reachability (impact or output) and the prerequisite (impactability or inputs). The first variable whose commonality between the two sets is equal to the reachable set is placed at the first level. Therefore, the elements of the first level will have the most impact in the model.

Table 7. Dividing the final access matrix into different levels

Agent	Reagen	Achievement (R _i)	(A _i) Prerequisite	Subscription (C _i)	Level
Audience / behavioral expectations	C ₁	2 ,1	4 ,3 ,2 ,1	2 ,1	4
Behavioral expectations for travel-related jobs	C ₂	2 ,1	4 ,3 ,2 ,1	2 ,1	4
All-encompassing cyberspace	C ₃	4 ,3	4 ,3	4 ,3	5
Influencer / characteristics	C ₄	4 ,3	4 ,3	4 ,3	5
Information / quality	C ₅	10 ,9 ,6 ,5	9 ,6 ,5 ,4 ,3 ,2 ,1 10	10 ,9 ,6 ,5	3
Content quality	C ₆	10 ,9 ,6 ,5	9 ,6 ,5 ,4 ,3 ,2 ,1 10	10 ,9 ,6 ,5	3
Influencer / influence	C ₇	11 ,8 ,7	8 ,7 ,6 ,5 ,4 ,3 ,2 ,1 11 ,10 ,9	11 ,8 ,7	2
To arouse	C ₈	11 ,8 ,7	8 ,7 ,6 ,5 ,4 ,3 ,2 ,1 11 ,10 ,9	11 ,8 ,7	2
Helping the audience make decisions	C ₉	10 ,9 ,6 ,5	9 ,6 ,5 ,4 ,3 ,2 ,1 10	10 ,9 ,6 ,5	3
Relationship / with the audience	T ₁₀	10 ,9 ,6 ,5	9 ,6 ,5 ,4 ,3 ,2 ,1 10	10 ,9 ,6 ,5	3
Conveying the desired image of the destination to the audience	C ₁₁	11 ,8 ,7	8 ,7 ,6 ,5 ,4 ,3 ,2 ,1 11 ,10 ,9	11 ,8 ,7	2
Audience behavioral / tendencie	C ₁₂	12	8 ,7 ,6 ,5 ,4 ,3 ,2 ,1 12 ,11 ,10 ,9	12	1

The standard matrix was then used to develop the final diagram and structural model. By grouping all factors at one level, the final reach matrix was created across columns and rows.

**Figure 1.** Interpretive structural model of the impact of social media influencers on sports tourist behavior

For example, factors such as (audience behavioral expectation) and (travel-related job behavioral expectation) are observed at level 4, while (ubiquitous virtual space) and (influencer characteristics) are at level 5. Next, all factors were sorted based on their level classification.

Figure 1 shows that the factors in the hierarchical model are divided into five levels. “Audience behavioral tendencies C12” is at the highest level (level one) and is directly influenced by “Influencer influence C7”, “Arousal C8”, and “Transferring the desired image to the audience C11” which were at the second level. The third level factors include “Information quality C5”, “Content quality C6”, “Audience decision-making assistance C9” and “Relationship with the audience C10”. At the fourth level, the factors “Audience behavioral expectation C1” and “Travel-related occupation behavioral expectation C2” were located, which are influenced by the fifth level factors, namely “Overall virtual space C3” and “Influencer characteristics C4”.

Finally, Mi'kmaq analysis was used to determine the key variables. Using Mi'kmaq analysis, factors can be classified into four clusters: (1) autonomous cluster, consisting of factors with weak influence and dependence; (2) dependent cluster, consisting of factors with low influence and high dependence; (3) independent cluster, consisting of factors with strong influence but weak dependence; and (4) linked cluster, consisting of factors with both strong influence and dependence.

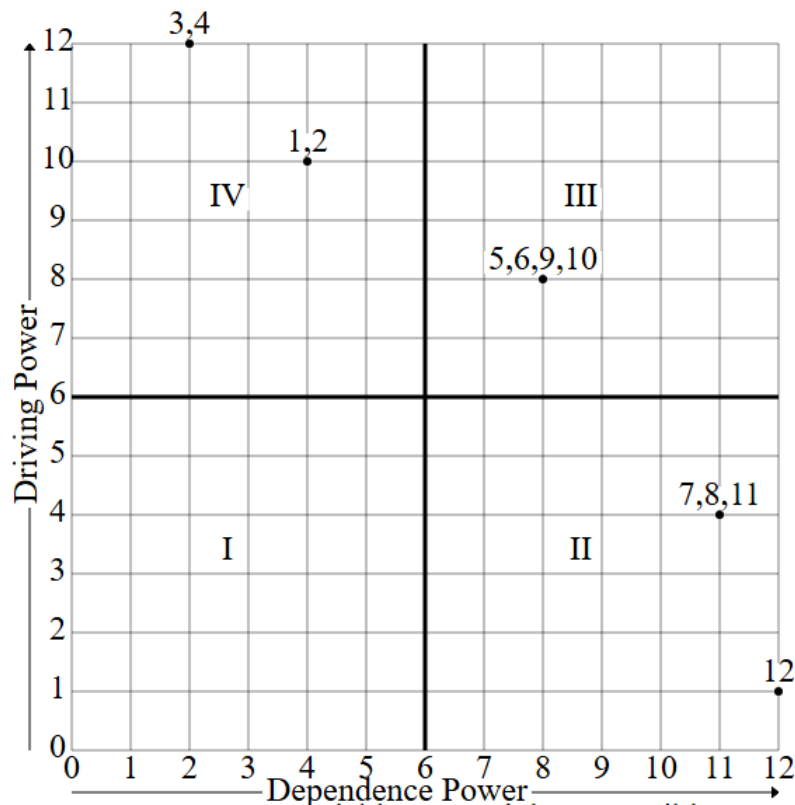


Figure 2. Results of the Mi'kmaq analysis

According to the Mikmak analysis, no factor is seen in the autonomous cluster. Factors such as "influencer influence", "stimulation", "transferring a favorable image to the audience" and "audience behavioral tendencies" are in the dependent cluster. The factors "ubiquitous virtual space", "influencer characteristics", "audience behavioral expectations" and "travel-related job behavioral expectations" are in the independent cluster, which have a great influence. Finally, it was found that the factors "information quality sources", "content quality", "assistance to audience decision-making" and "relationship with the audience" are in the linked cluster and play a key role in connection with other factors.

Discussion

The aim of this study was to construct an interpretive structural modeling of the impact of social media influencers on the behavior of sports tourists. The findings showed that the impact of social media influencers on the behavior of sports tourists can be explained at five levels. At the lower level, the themes of the pervasive cyberspace and the characteristics of the influencer were located. This means that the pervasive cyberspace and the characteristics of the influencer act as the main basis and platform for influence. The pervasive cyberspace refers to the increasing development of the use of social networks, which has created a broad and dynamic environment for influence. The characteristics of the influencer also refer to the factors that determine the degree of influence of these people on the behavior of the audience. This finding is consistent with the results of the studies of Nasirabadi, (2024), et al., (2024) Movahednia and Zahabi et al., (2023). This is because Nasirabadi (2024) showed that characteristics such as physical and social attractiveness, trustworthiness, perceived expertise, and content quality of influencer pages have a significant impact on followers' behavioral intentions and purchase intentions. Movahednia et al (2024) also showed that physical attractiveness of influencers has the greatest impact on brand attitude, while trustworthiness has the least impact on purchase intention. In addition, Zahabi et al (2023) showed that the level of users' mental engagement with influencers on social media has a positive impact on brand attitude, purchase intention, and travel intention.

The pervasive cyberspace has become one of the most important tools of influence by creating a broad platform for social communication and online interactions. According to the cognitive response theory (Petty et al., 2014), audiences respond positively to information and messages that are presented from credible sources and in accessible environments. This theory explains that the pervasive cyberspace, by facilitating access to information and creating interactions, provides conditions for people to engage with and process messages. Studies, including Nasirabadi (2024), have shown that social networks play an important role in shaping the behavioral intentions of audiences through social interaction and providing timely information. Especially in the field of sports tourism, searching for destinations, reviewing the experiences of other users, and receiving recommendations through social networks have a direct impact on tourists' decision-making.

Influencers' characteristics, including attractiveness, expertise, credibility, and trustworthiness, directly affect their impact on audiences. According to the source theory of communication (Wellman, 2023), the impact of messages depends on the credibility, attractiveness, and expertise of the source of communication. This theory explains that influencers who have visual and social attractiveness and provide specialized content are more likely to gain the trust and change the attitude of the audience. This is especially prominent in the tourism industry, where trust and quick influence are of great importance. Furthermore, this two-way interaction significantly affects the behavior of sports tourists and their decision-making, strengthening the position of the aforementioned theories in this field.

At the fourth level of the model, the themes of audience behavioral expectation and travel-related business behavioral expectation were located. This means that these two themes act as important mediators in the influence process and help shape the final behavior of tourists. Audience behavioral expectation includes the desire to receive reliable information, personalized recommendations, and imitate the models provided by influencers. In contrast, the behavioral expectation of travel-related businesses focuses on the role of influencers in promoting tourism destinations, increasing visibility, and accessing new markets. This finding is consistent with the results of studies by Zahabi et al (2023) and Omeish et al., (2024). Zahabi et al (2023) showed that the level of users' mental engagement with influencers has a direct impact on their willingness to travel, attitude towards the brand, and purchase intention. This finding confirms that audiences' behavioral expectations are naturally formed from interacting with influencers' content and play an important role in guiding their final decision-making. Omeish et al.'s (2024) study also showed that influencer marketing has a significant impact on destination image, visit intention, and user experience quality. This research emphasized that influencers fulfill the expectations of travel-related businesses in increasing awareness of tourism destinations and strengthening visit intention through the production of targeted content and continuous interaction with audiences.

This level of the model is related to Latané's (1981) social influence theory, which states that individuals' behavior is shaped in a social context and in response to authoritative sources. Influencers in this model act as authoritative and influential sources and, through direct interaction with audiences and collaboration with businesses, play a mediating role in the decision-making and action processes of tourists. As a result, the fourth level of the model indicates the importance of behavioral expectations in strengthening the influence of influencers and emphasizes the two-way interaction between audiences, influencers, and travel-related businesses. These interactions play a significant role in shaping the ultimate behavior of tourists and the development of the sports tourism industry.

At the third level of the model, the themes of information quality, content quality, audience decision-making assistance, and audience relationship were located. Like the fourth-level themes, these themes act as intermediate elements in the influence process and play an important role in gaining audience trust and guiding their behavior. Information quality includes

sharing real and personal experiences, providing specialized and technical information, and producing high-quality and unique posts and content. Emphasizing the authenticity of advertising and content strengthens the sense of trust in the audience and helps them make decisions. Content quality refers to the production of eye-catching and high-quality content that can identify suitable destinations and increase the attractiveness of travel for the audience. High-quality content, including creative images and videos, plays an important role in attracting the audience. Audience decision-making assistance helps to promote awareness and informed decision-making by providing accurate information about tourism destinations, better introducing the destination, and identifying the needs of the audience. This makes consumers travel more consciously and choose more suitable destinations. Relationships with audiences also include establishing friendly communication, reviewing feedback, and interacting directly with audiences. This interaction strengthens the sense of participation and importance of audience opinions and increases the effectiveness of advertising. These findings are consistent with the results of studies by Akbari et al., (2023) and Hernández-Méndez & Baute-Díaz, (2024). Akbari et al (2024) showed that satisfaction with image and quality content has a mediating role in the influence of influencers on purchase intention. In addition, Hernández-Méndez & Baute-Díaz (2024) emphasized that the quality of content and information provided by influencers has a direct relationship with users' attitudes towards destinations and travel decisions.

This level of the model is related to Chaiken's (1980) information processing theory, which states that the quality and depth of information received affects how audiences process information mentally and make their final decisions. High-quality information and content encourage audiences to process it more deeply and thus make more accurate decisions. In addition, the third level of the model emphasizes the importance of information and content quality along with human interactions. These elements directly affect audiences' trust and their ability to choose tourism destinations and play a fundamental role in the success of the influencer advertising process.

At the second level of the model, the themes of influencer influence, arousal, and conveying a desired image to the audience were located. These themes, like the third-level themes, act as key factors in the influence process and play an important role in motivating and changing the audience's attitude. Influencer influence includes gaining the audience's trust, their high adherence to influencers, and conveying thoughts and feelings to the target audience. Influencers, with their high influence on social networks and creating communities of loyal followers, have great power in encouraging audiences to gain new experiences. This level of influence allows influencers to have a significant impact on the audience's attitude and behavior. Arousal refers to stimulating the desire to travel among followers and creating a positive attitude towards tourism destinations. Influencers, with their emotional and inspiring content, encourage audiences to new experiences and increase their desire to travel. Also, conveying a desirable image to the audience includes creating a positive image of the destination in the minds of the audience and attracting them to specific destinations. By

producing creative and attractive content, influencers can create a unique and desirable image of the destination, which ultimately leads to an increase in the audience's intention to visit. These findings are consistent with the results of the studies of Kılıç et al., (2024) and Omeish et al., (2024). Kılıç et al (2024) showed that influencers play an important role in attracting audiences and encouraging them to participate in tourism by inspiring and conveying positive images. The study of Omeish et al., (2024) also emphasized that influencer marketing significantly affects the destination image and the audience's intention to visit.

This level of the model is related to Kelman's (1958) social influence theory, which states that credible and attractive sources can directly change people's attitudes and behaviors. Influencers, as credible sources, play an important role in guiding audience behavior by establishing emotional connections and conveying strong messages. In addition, the second level of the model emphasizes the importance of influencers' influence and their ability to arouse audiences and convey a favorable image. These elements directly affect audience attitudes and behaviors and play a fundamental role in the success of the influencer influence process in the tourism industry.

The findings showed that the behavioral intentions of the audience are at the highest level of the model. This theme indicates the final results of the influence of social media influencers on the audience and refers to their actual behaviors and lasting influence. These findings are consistent with the results of the studies of Omeish et al., (2024) and Kılıç et al., (2024). (2024) Omeish et al showed that influencer marketing not only strengthens the initial visit intention but also repeat tourism behaviors. The study of Kılıç et al., (2024) also emphasized that influencers can increase the sustainable engagement of the audience with tourism destinations by conveying positive and inspiring experiences.

This level of the model is related to Ajzen's (1991) Theory of Planned Behavior, which states that behavioral intentions, influenced by attitudes, social norms, and perceived control, are predictive of actual behavior. Influencers direct the behavioral intentions of audiences towards actual actions by creating positive attitudes toward destinations, influencing social norms, and providing actionable information. Furthermore, the highest level of the model emphasizes the importance of behavioral intentions as the final outcome of the influence process. These elements not only influence the actual behavior of audiences, but also contribute to the sustainable development of tourism and the success of influencer marketing in the tourism industry.

Furthermore, according to the Mikmak analysis, the position of factors in different clusters indicates the pattern of mutual influence and their role in the influence process of social media influencers. The absence of factors in the autonomous cluster indicates that all factors identified in this study have sufficient importance and influence, and none of them acts independently and without connection with other factors. This result indicates the coherence and correlation between the different factors in the influence model.

Dependent factors include "influencer influence", "evoking", "conveying a favorable image to the audience", and "audience behavioral tendencies". These factors represent the direct results of the influence process and are strongly dependent on independent and interrelated factors. For example, influencer influence and arousing emotions in the audience depend on contextual factors such as the pervasive cyberspace and the characteristics of the influencer. Also, audience behavioral tendencies, such as revisiting or word-of-mouth advertising, are directly influenced by the quality of the information and content provided. These dependencies indicate that dependent factors are mainly the result of the influence of other factors and cannot play their role properly without the presence of appropriate contexts.

Independent factors, including "pervasive cyberspace", "influencer characteristics", "audience behavioral expectations", and "travel-related business behavioral expectations", have great influence and act as fundamental and underlying elements in the model. These factors directly affect the structure and path of influence and shape the relationships and behavioral patterns of other factors. For example, pervasive cyberspace provides a broad platform for social communication and message transmission, without which other factors cannot function well. Influencer characteristics also play a key role in attracting trust and guiding audience behavior. Audience and business behavioral expectations, as the main determinants in shaping the direction and intensity of influence, directly affect the performance of dependent factors.

Linking factors, including "information quality sources", "content quality", "audience decision support", and "relationship with the audience", play a key role in the relationship between independent and dependent factors. These factors are the bridge between the influence of independent factors and the final results in dependent factors. For example, information and content quality are tools that connect the characteristics of the influencer and the overall cyberspace to results such as evoking or conveying a desired image. Relationship with the audience also ensures the sustainability and effectiveness of the influence and helps to build trust and effective communication. Linking factors are simultaneously influenced by independent factors and influence dependent factors, which explains their key position in the model.

Conclusion

This analysis shows that all factors are in an integrated and interconnected structure and no factor can act completely independently. Independent factors provide the context and context for influence, connecting factors make this influence flow, and dependent factors are the final results of this process. This coherence and correlation clearly highlights the importance of careful planning and coordination between the different elements in the process of influencers influencing the audience.

According to the results of this study, businesses active in the field of sports tourism (such as travel agencies, hotels, accommodation complexes, sports tour organizers, and sports tourism service providers) are advised to review their digital marketing strategies by focusing on the comprehensive capabilities of cyberspace and, in this way, expand their influence to new target

markets. Targeted cooperation with influential people who have key characteristics such as credibility, attractiveness, and expertise related to sports tourism can significantly enhance the effectiveness of these strategies. Prioritize smart investment in producing valuable, unique content that is tailored to the needs and interests of the target audience. The content produced should include accurate and up-to-date information, narratives of real experiences, and eye-catching images of sports destinations and events in order to gain the trust of the audience and play a decisive role in their decision-making process for traveling to sports destinations. It is also recommended that the Ministry of Cultural Heritage, Tourism and Handicrafts and the organizations in charge of sports tourism at the national and provincial levels provide material and moral support for the production of luxurious and attractive content with themes related to sports tourism that are produced and published by influential people on social media. This will help to better introduce the country's sports tourism attractions and capacities and attract domestic and foreign tourists. They should hold specialized training courses for tourism guides and other activists in this field on how to interact and cooperate effectively with influential people and utilize the diverse capacities of cyberspace in line with the sustainable development of sports tourism. In addition, it is recommended that sports federations and national and provincial Olympic and Paralympic committees utilize the high capacity of national athletes and Paralympic champions as sports tourism ambassadors and involve them in promotional and advertising programs for sports tourism destinations. In order to introduce domestic and international sports events as widely as possible, plan and implement continuous and targeted cooperation with influential people active in social networks. This can provide the basis for attracting tourists interested in sports events. Finally, all activists and stakeholders in the field of sports tourism (including government organizations, the private sector, and influential people) are advised to prioritize constructive and continuous interaction with audiences by responding to comments, receiving and analyzing feedback, and creating a sense of participation in cyberspace. This will play a key role in gaining the trust of the audience and attracting sports tourists. In order to increase the behavioral tendencies of the audience (such as revisiting the destination, positive word-of-mouth advertising, and introducing sports destinations to others), they should strive to convey positive, tangible, and inspiring experiences to the audience and encourage them to discover new sports tourism destinations.

This study had limitations that could affect the interpretation and generalization of the results. The first limitation relates to the sampling method. Although the use of purposive sampling and snowball strategy in this study, especially in the qualitative section, provided access to samples relevant to the research topic, due to its non-random nature, the samples may not be fully representative of the population of sports tourists and followers of influencers. Therefore, the findings can only be generalized to specific groups of these audiences who are directly connected to social media and sports tourism influencers and participated in the sampling. The second limitation relates to the generalizability of the findings. Although the qualitative section attempted to examine the transferability of the results by using expert opinions, due to the qualitative nature of the research and the limited sample size in the

qualitative section (15 people), generalizing the results to the entire community of sports tourists and followers of influential people on social media requires caution. In addition, given that the samples in the qualitative section were mainly selected from active users on social networks, the findings of this study may not be fully generalizable to all sports tourists, especially those who use social media less or live in different cultures and geographical areas with specific behavioral patterns. Therefore, in generalizing the results of this study to wider populations, sufficient attention should be paid to cultural, social differences, and patterns of social media use.

For future research, it is suggested to investigate possible negative effects such as creating unrealistic expectations of tourism destinations or psychological effects on audiences. Also, conducting comparative studies in different cultures and geographical regions can help identify cultural and social differences in the influence of influencers. In addition, it is suggested to use more advanced mixed methods such as multilevel analysis to examine the effects of mediating and moderating variables. Finally, future studies can investigate the long-term effects of influencer interactions on sports tourist behavior and assess the sustainability of their promotional effects.

Credit authorship contribution statement

All authoress contributed it the study conception, design, and implementation. All authors reviewed and approved the final manuscript.

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Conflict of Interest

The authors declare that there is no conflict of interest regarding the publication of this article.

Ethical consideration

The authors adhered to all ethical principles of research, including avoiding fabrication, falsification, plagiarism, and any other forms of scientific misconduct. Informed consent was obtained from all participants prior to data collection. This study was approved by the relevant ethics committee of Islamic Azad University, Karaj Branch.

Data availability statement

The data that support the finding of this study are available from the corresponding author upon reasonable request.

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References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Akbari, M., Hosseinzadeh, A., and Mehdipour, S. (2023). Characteristics of Social Media Influencers and Purchase Intention: Explaining the Role of Trust and Image Satisfaction (Case Study: Women's Clothing Industry). *Business Studies*, 21(119), 27-44 DOI:10.22034/BS.2022.557692.2596 [Persian].
- Alidoost Qahfarkhi, I., Dastgardi, M., Ranjbar, rare. Khosrow Menesh, R. (2023). Strategic analysis of active sports tourism development in Iran. *Scientific Quarterly Journal of Sports Marketing Studies*, 2(1), 73-90 <https://doi.org/10.22034/sms.2025.142305.1416> [Persian].
- Alizadeh, Lachin., and Nasiri, Mohammad. (2022). Meta-analysis of studies on the role of media and cyberspace in the development of Iranian sports tourism. *Strategic Studies on Sports and Youth*, 21(55), 97-112. <https://doi.org/10.22034/ssys.2022.500> [Persian].
- Attri, R., Dev, N., & Sharma, V. (2013). Interpretive structural modelling (ISM) approach: an overview. *Research journal of management sciences*, 2319(2), 1171. <https://www.isca.in/IJMS/Archive/v2/i2/2.ISCA-RJMS-2012-054.php>
- Bakker, D. (2018). Conceptualising influencer marketing. *Journal of emerging trends in marketing and management*, 1(1), 79-87. https://www.etimm.ase.ro/RePEc/aes/jetimm/2018/ETIMM_V01_2018_57.pdf
- Belanche, D., Casaló, L. V., Flavián, M., & Ibáñez-Sánchez, S. (2021). Understanding influencer marketing: The role of congruence between influencers, products and consumers. *Journal of Business Research*, 132, 186-195. <https://doi.org/10.1016/j.jbusres.2021.03.067>
- Braun, V., & Clarke, V. (2006). *Using thematic analysis in psychology*. Qualitative research in psychology, 3(2), 77-101. <https://doi.org/10.1191/1478088706qp063oa>
- Campbell, C., & Farrell, J. R. (2020). More than meets the eye: The functional components underlying influencer marketing. *Business horizons*, 63(4), 469-479. <https://doi.org/10.1016/j.bushor.2020.03.003>
- Chaiken, S. (1980). Heuristic versus systematic information processing and the use of source versus message cues in persuasion. *Journal of Personality and Social Psychology*, 39(5), 752–766. <https://doi.org/10.1037/0022-3514.39.5.752>
- Djafarova, E., & Rushworth, C. (2017). Exploring the credibility of online celebrities' Instagram profiles in influencing the purchase decisions of young female users. *Computers in human behavior*, 68, 1-7. <https://doi.org/10.1016/j.chb.2016.11.009>

- Faghir Ganji, M., Keshkar, S., Honari, H., & Shahlaei, J. (2021). Qualitative pattern of virtual reality application in sports marketing. *Sports Marketing Studies*, 2(4), 1-34 <https://origin-ir.magiran.com/p2393433>. [In Persian].
- Ghorbanpoor, R., & Azimzadeh, S. M. (2022). Determining The Relationship Between Brand Experience And Brand Loyalty And The Moderating Role of Demographic Variables (Case Study: Customers of Mashhad Water Parks Complex). *Sports Marketing Studies*, 3(4), 156-139 <https://doi.org/10.22034/sms.2022.62497>. [In Persian].
- Hernández-Méndez, J., & Baute-Díaz, N. (2024). Influencer marketing in the promotion of tourist destinations: mega, macro and micro-influencers. *Current Issues in Tourism*, 27(8), 1332-1342. <https://doi.org/10.1080/13683500.2023.2214354>
- Höjerström, F., & Jonsson, T. (2024). *From Likes to Laps: Unraveling the Impact of Influencer Marketing in Sportswear Fashion on the Consumer Behavior: A qualitative study of how brands use influencers to affect consumers*. Degree Project, Department of Business Administration, UMEA University. <https://www.diva-portal.org/smash/get/diva2:1873019/FULLTEXT01.pdf>
- Hussain, T., Wang, D., & Li, B. (2024). Exploring the impact of social media on tourist behavior in rural mountain tourism during the COVID-19 pandemic: The role of perceived risk and community participation. *Acta Psychologica*, 242, 104113. <https://doi.org/10.1016/j.actpsy.2023.104113>
- Kelman, H. C. (1958). Compliance, identification, and internalization: Three processes of attitude change. *Journal of Conflict Resolution*, 2(1), 51–60. <https://doi.org/10.1177/002200275800200106>
- Kılıç, İ., Seçilmiş, C., & Özdemir, C. (2024). The role of travel influencers in volunteer tourism: an application of the cognitive response theory. *Current Issues in Tourism*, 27(2), 200-216. <https://doi.org/10.1080/13683500.2023.2174087>
- Latané, B. (1981). The psychology of social impact. *American Psychologist*, 36(4), 343–356. <https://doi.org/10.1037/0003-066X.36.4.343>
- Landis, J. R., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics*, 33(1), 159-174. <https://doi.org/10.2307/2529310>
- Leung, F. F., Gu, F. F., & Palmatier, R. W. (2022). Online influencer marketing. *Journal of the Academy of Marketing Science*, 50(2), 226-251. <https://doi.org/10.1007/s11747-021-00829-4>
- Lou, C., & Yuan, S. (2019). Influencer marketing: How message value and credibility affect consumer trust of branded content on social media. *Journal of interactive advertising*, 19(1), 58-73. <https://doi.org/10.1080/15252019.2018.1533501>
- Mandal, A., & Deshmukh, S. G. (1994). Vendor selection using interpretive structural modelling (ISM). *International journal of operations & production management*, 14(6), 52-59. <https://doi.org/10.1108/01443579410062086>
- Manthiou, A., Ulrich, I., & Kuppelwieser, V. (2024). The travel influencer construct: An empirical exploration and validation. *Tourism Management*, 101, 104858. <https://doi.org/10.1016/j.tourman.2023.104858>

- Ministry of Communications and Information Technology. (2024). Internet penetration rate in Iran. Providing statistics and reports on the country's communications and information technology (ICT). <https://www.ict.gov.ir> [Persian].
- Mohamadi Turkmani, E. , Mohammadi Torkamani, H. and jabraeile, A. (2021). Ecological-Humanitilal Feasibility of Sports-Ecotourism Development in Desert Areas (Case Study: Qom Province). *Sports Marketing Studies*, 2(1), 100-130. doi: <https://www.doi.org/10.34785/J021.2021.409>[Persian].
- Movahednia, F., Nasiri Abukhaili, S., and Kazemi, R. (2024). Investigating the characteristics of individuals influencing purchase intention in social media influencer marketing with the mediating roles of personalities and brand attitude. *Journal of Accounting and Management Perspectives*, 7(88), 133-160. https://www.jamv.ir/article_196608.html [Persian].
- Omeish, F., Sharabati, A., Abuhashesh, M., Al-Haddad, S., Nasereddin, A., Alghizzawi, M., & Badran, O. (2024). The role of social media influencers in shaping destination image and intention to visit Jordan: The moderating impact of social media usage intensity. *International Journal of Data and Network Science*, 8(3), 1701-1714 DOI:10.5267/j.ijdns.2024.2.017.
- Petty, R. E., Priester, J. R., & Wegener, D. T. (2014). *Cognitive processes in attitude change*. In Handbook of social cognition (pp. 69-142). Psychology Press. <https://www.taylorfrancis.com/chapters/edit/10.4324/9781315807096-2>
- Prabhu, A., & Patil, S. (2023). The Pursuit of Reputation: Unlocking the Power of Public Relations. *New Delhi: Westland Business*. <https://www.amazon.com/Pursuit-Reputation-Unlocking-Public-Relations/dp/9357768394>
- Rezaei, M., and Zarepour Nasirabadi, E. (2024). Investigating the effect of the characteristics of influential people and their pages on behavioral intentions and purchase intentions of followers on social media. *Journal of Management, Advertising and Sales*, 5(2), 1-21 10.22034/asm.2024.715959[Persian].
- Santateresa-Bernat, P., Sánchez-García, I., & Curras-Perez, R. (2023). I like you, or I like what you say? Effect of influencer on tourists' behaviours. *Current Issues in Tourism*, 26(19), 3160-3174. <https://doi.org/10.1080/13683500.2022.2108771>
- Schouten, A. P., Janssen, L., & Verspaget, M. (2021). Celebrity vs. Influencer endorsements in advertising: the role of identification, credibility, and Product-Endorser fit. *In Leveraged marketing communications* (pp. 208-231). Routledge. <https://www.taylorfrancis.com/chapters/oa-edit/10.4324/9781003155249-12>
- Sorooshian, S., Tavana, M., & Ribeiro-Navarrete, S. (2023). From classical interpretive structural modeling to total interpretive structural modeling and beyond: A half-century of business research. *Journal of Business Research*, 157, 113642. <https://doi.org/10.1016/j.jbusres.2022.113642>.
- Stewart, K., & Williams, M. (2005). Researching online populations: the use of online focus groups for social research. *Qualitative Research*, 5(4), 395-416. <https://doi.org/10.1177/1468794105056916>
- Technavio. (2024, July 12). Sports tourism market size is set to grow by USD 771.4 billion from 2024-2028: Increasing number of sporting events to boost the market growth. *PR Newswire*. Retrieved

from <https://www.prnewswire.com/news-releases/sports-tourism-market-size-is-set-to-grow-by-usd-771-4-billion-from-2024-2028--increasing-number-of-sporting-events-to-boost-the-market-growth-technavio-302195037.html>

- Wellman, M. L. (2023). A friend who knows what they're talking about: Extending source credibility theory to analyze the wellness influencer industry on Instagram. *New Media & Society*, 14614448231162064. <https://doi.org/10.1177/14614448231162064>
- Xu, X., & Pratt, S. (2018). Social media influencers as endorsers to promote travel destinations: an application of self-congruence theory to the Chinese Generation Y. *Journal of travel & tourism marketing*, 35(7), 958-972. <https://doi.org/10.1080/10548408.2018.1468851>
- Yan, Z., & Huan, W. (2024). The Role of Social Media in Sports Tourism Marketing: A Review and Future Outlook. *Frontiers in Sport Research*, 6(4), 132-137. <https://doi.org/10.25236/FSR.2024.060420>.
- Yuliandari, M., & Anom, E. (2024). Marketing Communication Strategy of the Youth and Sports Tourism Office in Promoting Muaro Jambi Temple. *JIM: Jurnal Ilmiah Mahasiswa Pendidikan Sejarah*, 9(1), 101-106. <https://doi.org/10.24815/jimps.v9i1.29400>
- Zahabi, S., Asadi, A., and Khodaidari, B. (2023). Studying the effect of the level of customer involvement in the marketing process of influential people on the desire to travel to the destination, attitude towards the brand and intention to buy. *Business Management*, 2(18), 1-19 10.30495/jomm.2022.69502.1972[Persian].
- Zhang, Y., Nguyen, H. W., Jung, Y. H., & Ren, I. Y. (2024). The social media industry: where is it heading?. *Journal of Business Strategy*, 45(2), 81-88. <https://doi.org/10.1108/JBS-12-2022-0209>.

