The intervention of Mobile Internet on Sports Behavior and Sports Awareness of College Students

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Abstract

Mobile internet information has an unintended effect on college students' sports behavior and awareness, although the specific implications have not been widely discussed. Existing research focuses primarily on behavioral science and sports communication. Using prior research as a foundation, this article examines the intervention of mobile internet on the sports behavior and awareness of college students. Specifically, an intervention event network was built and subjected to static structural analysis to determine the influence of mobile internet on college students' sports behavior and awareness. Then, using system event analysis, a well-established technique in complex system research, the interactive relationship between different intervention events in the network was thoroughly analyzed, and the composite degree of influence between them was assessed. The integrated fuzzy-interpretative structural model was then used to deduce the event-based hierarchy model's core logic and action mechanism. Finally, the proposed paradigm was demonstrated to be effective via experiments.

Keywords: Mobile internet, college students, sports behavior, sports awareness, the intervention model

1. Introduction

Mobile internet enables college students to quickly and easily acquire a variety of knowledge (Aziz, Setyawan, & Saddhono, 2021; Lu et al., 2019; Neha, Sidiq, & Zaman, 2021; Qiu, 2017; Sun & Li, 2021; Sun et al., 2018; Xie, Zhang, & Liu, 2021; Zhang, Zhao, & Tang, 2021; Zhang, 2020; Zheng & Chen, 2021). The development of intelligent mobile terminals accelerates the use of mobile internet for the distribution of sports knowledge, sports games, and sports news, as well as for physical exercise services (Li & Li, 2022; Min, 2017; Wang, 2020; Wu, 2021; Wu, 2022; Xiaodong & Weidong, 2021; Yang, 2021). Mobile internet information has an unintentional effect on college students' sports behavior and awareness (Dong, 2021; Kim & Kim, 2019; Li & Fan, 2021; Li, 2021; Liu, Li, & Du, 2021; Xu, Liang, & Ji, 2020). To assist college students in receiving sports information correctly via mobile internet (Lin, Jiang, & Wang, 2013; Liu & Li, 2013; Liu et al., 2012; Yao, Wu, & Wu, 2012), it is necessary to conduct an in-depth examination of college students' use of sports information via mobile internet, as well as the impact of this information on their behavior and awareness. The related outcomes would encourage the healthy growth of mobile internet and enhance college students' athletic abilities.

Digital technology advancements are enhancing the lifestyles and behaviors of regular people worldwide. Several experts have recently examined the infiltration of network-based sports applications into students' recreational activities. Luo and He (2021) conducted a rigorous subject analysis of the literature on that penetration. The quantitative data from 10 selected research were submitted to a thorough topic analysis in five steps: compilation, decomposition, reorganization, interpretation, and summary, using a unique data analysis model. The findings indicate that systematic subject analysis efficiently motivates students to engage in more low-intensity sports. Chuang, Chou, and Chen (2005) investigated the attitudes, motivations, limitations, and satisfaction of Taiwanese college students and then clarified sports and leisure participation patterns and the relationships between these patterns. A regression analysis was conducted to determine satisfaction with campus-based sports and recreational activities. The findings indicate that participation in sporting activities increases contentment, whereas leisure activities had the strongest, most significant, and most direct effect on satisfaction. Zhang and Hu (2020) used computer technology to examine the changes in the lifelong sports awareness of 500 students from three colleges in southeastern China's Fujian Province after participating in community interaction. They found that community interaction positively affected college students' lifelong sports awareness. Liang and Zhang (2014) examined the physical exercise status and understanding of college students in China's reform of physical education (PE) courses. They attempted to engage college students in the function and enjoyment of physical fitness using a literature analysis and field survey. Thus, they increased college students' motivation and interest in sports participation, enhanced their lifelong sports awareness, and urged them to participate more actively in sports activities.

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Chinese scholars have rarely examined how mobile internet-based sports information affects college students' sports behavior and awareness. Foreign experts concentrated their efforts primarily on behavioral science and sports communication. Existing research on college students' exposure to sports information via mobile internet focuses primarily on the negative consequences of such material in various dimensions and from different vantage points. This work aims to investigate and analyze the motivation, frequency, and duration of college students' exposure to sports material via mobile internet and determine whether the exposure affects their sports awareness and conduct.

Using past research as a foundation, this paper examines the impact of mobile internet on college students' sports behavior and awareness. Section 2 creates an intervention event network to investigate the effect of mobile internet on college students' sports behavior and understanding and conducts a static structural analysis, including node characteristics, node centrality, and network centrality. Section 3 employs system event analysis, a well-established technique in complex system research, to probe the interaction link between the network's many intervention events and quantify the composite degree of effect between them. Section 4 employs an integrated fuzzy-interpretative structural model to deduce the event-based hierarchy model's core logic and action mechanism. Finally, the T, T+S, and T-S values of Layer 2 intervention events were determined, and the test findings for the online intervention event action mechanism model. The experimental results validate the proposed model's efficacy.

2. Network Construction and Static Structural Analysis

2.1 Network construction

To disclose the interplay between intervention events, this paper analyzes the topological features and dynamic trends of the intervention event network, which was set up for the influence of mobile internet over the sports behavior and sports awareness of college students, which includes nine interventions in two categories, namely, implicit intervention I_1 and explicit intervention I_2.

Implicit intervention includes the intervention of mobile internet on college students' sports value I_{11}, attitude to physical exercise I_{12}, sports interest I_{13}, and motive of sports participation I_{14}.

Direct intervention includes the intervention of mobile internet on college students' physical exercise state I_{21}, acquisition method of sports information I_{22}, state of sports consumption value I_{23}, and form of idol worship I_{24}.

Specifically, sports value I_{11} includes the intervention on college students' educational growth I_{111}, body fitness I_{112}, interpersonal relationship I_{113}, spirit I_{114}, leisure and entertainment I_{115}, social economy I_{116}, social stability I_{117}, and patriotism I_{118}.

Attitude to physical exercise I_{12} includes the intervention on college students' mental attitude I_{121}, emotional experience I_{122}, behavioral intention I_{123}, and behavior control I_{124}.

Sports interest I_{13} includes the intervention on college students' attitudes like strongly uninterested I_{131}, slightly indifferent I_{132}, neutral I_{133}, slightly interested I_{134}, and strongly interested I_{135}.

The motive of sports participation I14, includes the intervention in college students' school performance I_{141}, interpersonal communication I_{142}, entertainment and relaxation I_{143}, bodybuilding I_{144}, and hobbies and interests I_{145}.

Physical exercise state I_{21} includes the intervention on college students' time of each physical exercise I_{211}, frequency of physical exercises I_{212}, the intensity of physical exercise I_{213}, venue selection of physical exercise I_{214}, items of physical exercise I_{215}, and organizational form of physical exercise I_{216}.

The acquisition method of sports information I22, includes the intervention on college students' interaction with new media I_{221}, we media I_{222}, and online videos I_{223}.

State of sports consumption value I_{23} includes the intervention on college students' sports consumption level I_{231}, and sports consumption items I_{232}.

State of idol worship I_{24} includes the intervention on college students' idol worship I_{241} and lack of idol worship I_{242}.

Figure 1 shows the action mechanism of the intervention events. Without considering the indirect effects of the intervention events, this paper constructs the intervention event network solely based on the direct impact of these events.

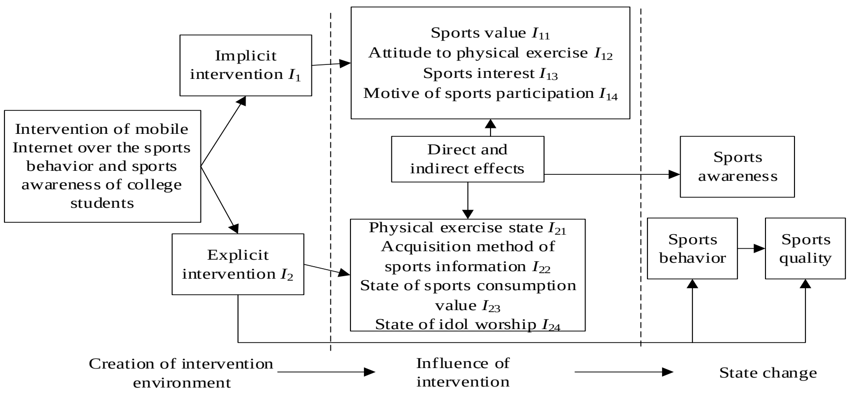


Figure 1. Action mechanism of intervention events

The topology of the intervention event network has three primary features: node features, node centrality, and network centrality. The node feature reflects the global characteristics of the network, while the node and network centralities reveal the key intervention events and node differences, respectively.

2.2 Static structural analysis

For node feature analysis, this paper chooses degree distribution to judge whether the proposed intervention event network is a scale-free network. If yes, then the degree of the network obeys the power-law distribution. The node probability is proportional to a power of the degree *l*:

$$FB(l) \propto l^{-\beta}, -2 \le \beta \le 3 \quad (1)$$

Since the intervention event network is small, and the statistical feature of $FB(l)$ is not very significant, i.e., nodes with a large *l* may exist at the tail of the network degree distribution function. To reduce the statistical deviation, the degree distribution $FB(l)$ is described by the cumulative degree distribution function FB_l. Then, the FB_l of the scale-free intervention event network obeys the power-law distribution with the power exponent of β-1:

$$FB_l \propto \sum_{a=l}^{\infty} a^{-\beta} \propto l^{-(\beta-1)} \quad (2)$$

For node centrality analysis, this paper describes the centrality of the intervention event network with network degree, closeness, and betweenness. The degree $F_T(i)$ of a network of the size m can be defined as:

$$F_T = \frac{\sum_{i=1}^{m}\left[F_T^*(i)-F_T(i)\right]}{\max\sum_{i=1}^{m}\left[F_T^*(i)-F_T(i)\right]} \quad (3)$$

where, $F^*_T(i)=maxF_T(i)$. Since the node degree falls in $[1,m\text{-}1]$, $max\Sigma^m_{i=1}[F^*_T(i)\text{-}F_T(i)]=[(m\text{-}1)\text{-}1]=m^2\text{-}3m\text{+}2$. Thus, formula (16) can be simplified as:

$$F_T = \frac{\sum_{i=1}^{m}\left[F_T^*(i)-F_T(i)\right]}{m^2-3m+2} \quad (4)$$

The closeness $F_f(i)$ of a network of the size m can be defined as:

$$F_f = \frac{\sum_{i=1}^{m}\left[F_f^*(i)-F_f(i)\right]}{\max\sum_{i=1}^{m}\left[F_f^*(i)-F_f(i)\right]} \quad (5)$$

where, $F^*_f(i)=maxF_f(i)$. If the distance from node i to any other node is 1, and if the distance between any two nodes except node i is 2, then the maximum closeness of node i is 1, and the minimum closeness of the nodes except node i is $1/2m\text{-}3$. Thus, formula (18) can be simplified as follows:

$$F_f = \frac{2m-3}{2(m^2-3m+2)}\sum_{i=1}^{m}\left[F_f^*(i)-F_f(i)\right] \quad (6)$$

The betweenness $F_Y(i)$ of a network of the size m can be defined as:

$$F_Y = \frac{\sum_{i=1}^{m}\left[F_Y^*(i)-F_Y(i)\right]}{\max\sum_{i=1}^{m}\left[F_Y^*(i)-F_Y(i)\right]} \quad (7)$$

where, $F^*_Y(i)=maxF_Y(i)$. Since the node betweenness belongs to $[0,(m\text{-}1)(m\text{-}2)]$, $max\Sigma^m_{i=1}[F^*_Y(i)\text{-}F_Y(i)]=[(m\text{-}1)(m\text{-}2)\text{-}(m\text{-}1)]$. Thus, formula (20) can be simplified as:

$$F_Y = \frac{\sum_{i=1}^{m}\left[F_Y^*(i)-F_Y(i)\right]}{m^3-4m^2+5m-2} \quad (8)$$

To measure the difference between network nodes, this paper computes network degree, closeness, and betweenness on Pajek 5.08.

3. Action Mechanism Analysis

Based on the proposed intervention event network, this paper relies on the system event analysis, a mature tool in complex system research, to deeply analyze the interactive relationship between different intervention events in the network and quantify the composite degree of influence between them.

In traditional system event analysis, the relevant variables are processed by fuzzy triangular numbers as follows:

If there exists a membership function $v_\psi(a)$: $R \to [0,1], a \in R$, then:

$$v_\psi(a) = \begin{cases} 0, if\ else \\ \frac{a-k}{n-k}, k < a \le n \\ \frac{s-a}{s-n}, n < a \le s \end{cases} \quad (9)$$

Then, a triangular fuzzy number $\psi=(k,n,s)$, $k \le n \le s$ can be defined in the real domain.

In this paper, the evaluated states of college students' sports behavior and sports awareness in the context of mobile internet are converted into a triangular fuzzy number $(k^l_{ij}, n^l_{ij}, s^l_{ij})$, which reflects the degree of influence of event i over event j during the state judgment of sports behavior and sports awareness of subject l. Then, $(k^l_{ij}, n^l_{ij}, s^l_{ij})$ is converted into a precise value to defuzzify the judgment results. The specific steps are as follows:

Step 1. To reduce the subjective difference in state judgments, normalize the relevant data by:

$$ak_{ij}^l = \frac{k_{ij}^l - \min_{l \le l \le L} k_{ij}^l}{\Delta_{\min}^{\max}} \quad (10)$$

$$an_{ij}^l = \frac{n_{ij}^l - \min_{k \le l \le L} k_{ij}^l}{\Delta_{\min}^{\max}} \quad (11)$$

$$as_{ij}^l = \frac{s_{ij}^l - \min_{k \le l \le L} k_{ij}^l}{\Delta_{\min}^{\max}} \quad (12)$$

where, $\Delta^{max}_{min}=max_{1\le l\le L}s^l_{ij}\text{-}min_{1\le l\le L}k^l_{ij}$。

Step 2. Let akr^l_{ij}, asr^l_{ij}, and a^l_{ij} be the left, right, and overall standard values. Then, convert the normalized fuzzy number into akr^l_{ij} and asr^l_{ij} by:

$$akr_{ij}^l = \frac{an_{ij}^l}{1+an_{ij}^l+ak_{ij}^l} \quad (13)$$

$$asr_{ij}^l = \frac{as_{ij}^l}{1+as_{ij}^l+an_{ij}^l} \quad (14)$$

Then, transform akr^l_{ij} and asr^l_{ij} into a^l_{ij} by:

$$a^l_{ij} = \frac{akr^l_{ij}(1-akr^l_{ij})+asr^l_{ij}asr^l_{ij}}{1-akr^l_{ij}+asr^l_{ij}} \quad (15)$$

Step 3. Quantify the degree of influence of event i over event j during the state judgment of sports behavior and sports awareness of subject l by:

$$x^l_{ij} = \min_{k\le l\le L} k^l_{ij} + a^l_{ij}\Delta^{\max}_{\min} \quad (16)$$

Quantify the entire ternary fuzzy number, i.e., the degree of influence of event i over event j during the state judgment of all subjects, by:

$$x_{ij} = \frac{1}{l}\sum_{l=1}^{l} x^l_{ij} \quad (17)$$

This paper calculates the relationships between the events using the functions embedded in Excel and the self-designed VBA programs. Let X be the direct influence matrix; T be the normalized influence matrix. Then, X can be converted into T by:

$$T = \frac{1}{\max_{k\le l\le 15}\sum_{j=1}^{15} x_{ij}} X \quad (18)$$

Let D be the total influence matrix. Then, T can be converted into D by:

$$D = T(\theta - T)^{-1} \quad (19)$$

Finally, the sum of each row s_i and the sum of each column f_j in D can be respectively calculated by:

$$s_i = \sum_{j=1}^{15} p_{ij} \quad (20)$$

$$f_j = \sum_{i=1}^{15} d_{ij} \quad (21)$$

where, s_i is the real influence of event i over other events, i.e., the degree of influence T of event i; f_i is the real influence of different events over event i, i.e., the degree of being influenced S of event i. If $i=j$, then s_i+f_j is the importance of the influence of event i over the state of college students' sports behavior and sports awareness, and can be regarded as the centrality $T+S$. Meanwhile, s_i-f_j can be regarded as the cause of degree $T-S$. If $s_i-f_j>0$, then event i is the cause of the state change of college students' sports behavior and sports awareness; if $s_i-f_j<0$, then event i is the result of the state change of college students' sports behavior and sports awareness.

4. Action Mechanism Modeling

The preceding section recognizes the key intervention events through the in-depth analysis of their interactive relationships in the network. This section adopts the integrated fuzzy-interpretative structural model to reveal the event-based hierarchy model's internal logic and action mechanism.

This paper superimposes matrices D and H into the composite influence matrix $M=H+D$ of the intervention events. The threshold ε can be determined based on matrix M to optimize the event-based hierarchy model's structure continuously. Further computation would solve the reachability matrix N of the events affecting the state of college students' sports behavior and sports awareness:

$$x_{ij} = \begin{cases} 1, x_{ij} \ge \varepsilon \\ 0, x_{ij} < \varepsilon \end{cases}, \quad (i = 1,2,\ldots,36; j = 1,2,\ldots,36) \quad (22)$$

Based on the reachability matrix N, it is possible to derive the reachable set $L(N_i)$, antecedently set $A(N_i)$, and collective set $E(N_i)$ for the events affecting the state of college students' sports behavior and sports awareness:

$$L(N_i) = \{N_i | x_{ij} = 1\}$$
$$A(N_i) = \{N_j | x_{ij} = 1\}$$
$$E(N_i) = L(N_i) \cap A(N_i) \quad (23)$$

If two intervention events belong to the same $L(N_i)$ and $E(N_i)$, then they will be treated as layer i events λ_i of the event-based hierarchy model:

$$\lambda_i = \{N_j | N_j \in N - \lambda_0 - \lambda_1 - \ldots - \lambda_{i-1}, L(N_i) = E(N_i)\} \quad (24)$$

After identifying λ_i, the relevant intervention events are eliminated. The same operation is repeated in search of the events on the next layer until the action mechanism of all events is fully disclosed.

5. Experiments and Results Analysis

The intervention indices were obtained by summing up the frequency and loss degree of each intervention event, multiplying the values of the two parameters, and taking the average of the products. The values of these indices are recorded in Table 1.

Table 1

Indices of intervention events

Intervention event	Intervention index	Intervention event	Intervention index	Intervention event	Intervention index	Intervention event	Intervention index
I_{111}	5.16	I_{122}	3.47	I_{142}	8.11	I_{216}	0.24
I_{112}	4.25	I_{123}	3.48	I_{143}	3.62	I_{221}	0.36
I_{113}	7.42	I_{124}	7.42	I_{144}	4.07	I_{222}	3.82
I_{114}	5.68	I_{131}	6.18	I_{145}	3.28	I_{223}	3.68
I_{115}	3.28	I_{132}	6.59	I_{211}	3.61	I_{231}	1.74
I_{116}	3.36	I_{133}	7.85	I_{212}	3.72	I_{232}	4.26
I_{117}	4.18	I_{134}	5.12	I_{213}	3.09	I_{241}	5.58
I_{118}	3.64	I_{135}	8.05	I_{214}	4.16	I_{242}	5.92
I_{121}	0.82	I_{141}	6.48	I_{215}	3.57		

This paper establishes a dual criteria matrix for the intervention events (Table 2). It can be seen that five intervention events have a relatively strong influence on the sports behavior and sports awareness of college students, namely, I_{212}, I_{141}, I_{143}, I_{144}, and I_{221}. Thus, college students' sports behavior and understanding would change if any of the five events occurred (i.e., school performance, entertainment and relaxation, bodybuilding, frequency of physical exercises, and new media).

This paper computes the node degree, closeness, and betweenness of the network. Based on Pajek 5.08, the centrality values of some nodes were obtained (Table 3).

As shown in Table 3, I_{212}, I_{141}, I_{143}, I_{144}, and I_{221} were the top five nodes by degree centrality. These events have a relatively strong influence in the network. I_{122}, I_{123}, I_{124}, I_{131}, and I_{242} were the top five nodes by closeness centrality. These events are closely correlated with each other. I_{132}, I_{133}, I_{134}, I_{135}, and I_{214} were the top five nodes by betweenness centrality. These events are the hub of the network. Figures 2-4 provide the cause-effect diagrams of events on Layers 3, 2, and 1, respectively. The influence, centrality, and proactiveness of events on each layer can be clearly seen in these diagrams.

Table 4 sorts out the *T*, *T+S*, and *T-S* values of Layer 2 intervention events for the influence of mobile internet over college students' sports behavior and sports awareness. To demonstrate the effectiveness of our action mechanism model for network intervention events, the cause-effect diagrams of Layer 1 intervention events were plotted at different thresholds ε (Figure 5), and the test results of the model were obtained (Table 5).

Table 2

Dual criteria matrix for the intervention event

	Strongly large	Slightly large	General	Slightly small	Strongly small
Strongly rare	I_{142}				I_{222}, I_{223}
Slightly rare				I_{117}, I_{118}, I_{121}	I_{231}, I_{232}
General		I_{211}, I_{213}			
Slightly frequent	I_{122}, I_{123}, I_{124}, I_{131}, I_{242}	I_{111}, I_{112}, I_{215}, I_{216}		I_{114}, I_{115}, I_{116}, I_{241}	I_{132}, I_{133}, I_{134}, I_{135}, I_{113}, I_{214}
Strongly frequent	I_{145}	I_{212}, I_{141}, I_{143}, I_{144}, I_{221}			

Table 3

Centralities of some nodes

Ranking	1	2	3	4	5
Intervention node	I_{212}	I_{141}	I_{143}	I_{144}	I_{221}
Degree centrality	0.325	0.336	0.351	0.208	0.211
Intervention node	I_{122}	I_{123}	I_{124}	I_{131}	I_{242}
Closeness centrality	0.518	0.462	0.433	0.428	0.415
Intervention node	I_{132}	I_{133}	I_{134}	I_{135}	I_{214}
Betweenness centrality	0.328	0.224	0.175	0.139	0.118

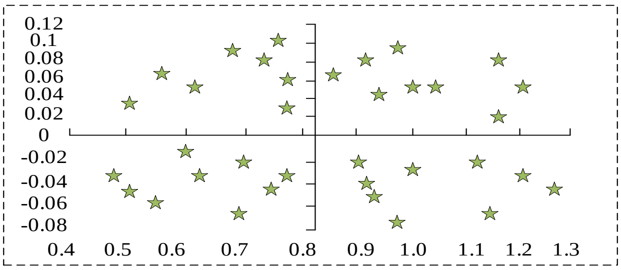


Figure 2. Cause-effect diagram of Layer 3 events

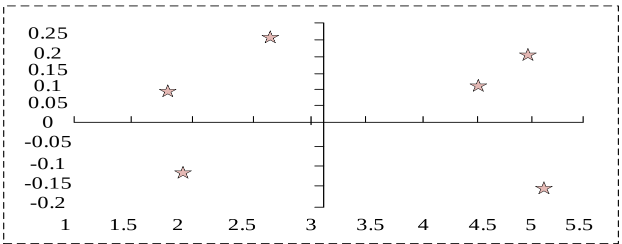


Figure 3. Cause-effect diagram of Layer 2 events

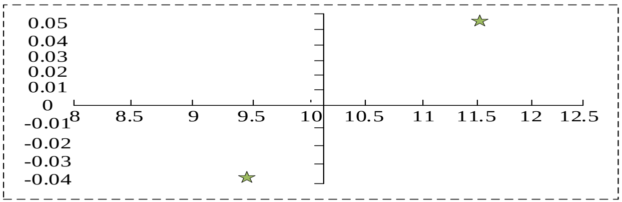


Figure 4. Cause-effect diagram of Layer 1 events

Table 4

T, T+S, and T-S values of Layer 2 events

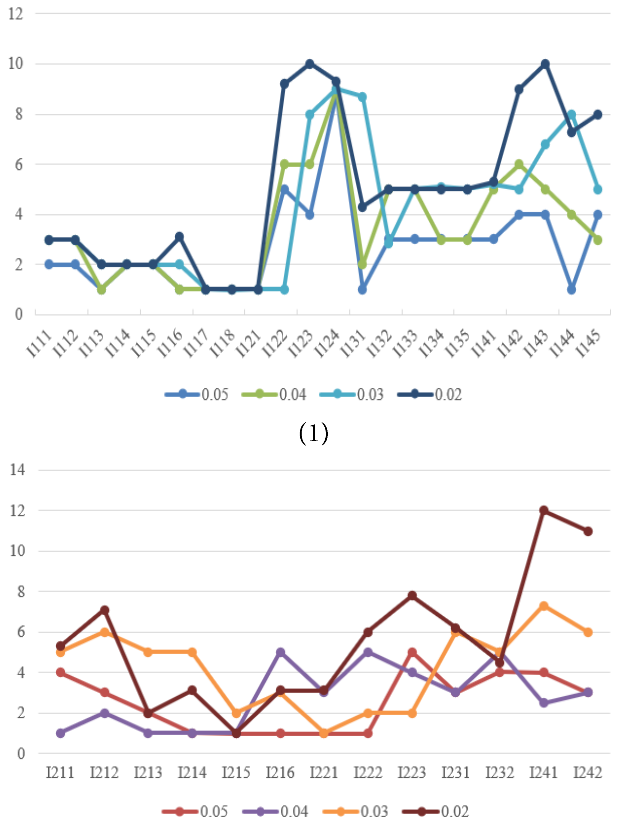
Implicit intervention	I_{11}	I_{12}	I_{13}	I_{14}
D	1.1257	0.7251	0.8063	1.3268
D ranking	6	8	7	3
R	1.0852	0.7481	0.9253	1.3526
R ranking	4	8	7	3
D+R	2.0158	1.6235	1.5827	2.8625
D+R ranking/weight	6(0.0658)	7(0.0428)	8(0.0582)	3(0.1328)
D-R	-0.0849	-0.0358	0.0295	0.0968
D-R ranking	7	6	4	1
Explicit intervention	I_{21}	I_{22}	I_{23}	I_{24}
D	1.7135	1.1485	1.2625	1.3869
D ranking	1	5	4	2
R	0.9352	1.0748	1.3625	1.9485
R ranking	6	5	2	1
D+R	3.6281	2.7485	3.0625	2.1893
D+R ranking/weight	1(0.1628)	4(0.0629)	2(0.0684)	5(0.0758)
D-R	0.0958	-0.0274	-0.1069	0.0856
D-R ranking	2	5	8	3

The test indices include CR value and P-value. The former is the ratio of the estimated value of a parameter to its standard deviation. As shown in Table 5, the CR value and P-value of I_{14} were 1.529 (<2) and 0.059 (>0.05). Thus, the intervention event has a relatively insignificant correlation with other intervention events. The paths between the other intervention events all passed the significance test at the level of 0.05.

Table 5

Test results on the action mechanism model for network intervention events

Implicit intervention	I_{11}	I_{12}	I_{13}	I_{14}
Standard regression coefficient	0.362	0.295	0.402	0.825
Standard deviation	0.085	0.135	0.114	0.085
C.R. value	4.162	2.158	3.628	1.529
P value	0.001	0.000	0.016	0.052
Support (Yes/No)	Yes	No	Yes	Yes
Explicit intervention	I_{21}	I_{22}	I_{23}	I_{24}
Standard regression coefficient	0.847	0.925	0.963	0.858
Standard deviation	0.083	0.102	0.072	0.639
C.R. value	2.842	3.263	4.184	3.268
P value	0.028	0.001	0.008	0.006
Support (Yes/No)	Yes	No	Yes	Yes



(2)

Figure 5. Cause-effect diagrams of Layer 1 intervention events at different thresholds ε

6. Conclusions

Informed by the existing knowledge, this paper explores the intervention of mobile internet on college students' sports behavior and awareness. First, the authors establish an intervention event network to examine the influence of mobile internet on college students' sports behavior and understanding, followed by static structural analysis. Then, using system event analysis, a well-established technique in complex system research, the interactive link between different intervention events in the network was thoroughly analyzed, and the composite degree of effect between them. Following that, an integrated fuzzy-interpretative structural model was used to clarify the event-based hierarchy model's internal logic and action mechanism. The authors constructed a dual criteria matrix for intervention events based on experimental findings and indices of intervention events, computed the degree, closeness, and betweenness of nodes in the network, and assigned centrality values to some nodes.

Additionally, cause-effect diagrams were created for Layers 1-3, illustrating the influence, centrality, and proactiveness of events occurring on each layer. Finally, the T, T+S, and T-S values for Layer 2 intervention events were solved, and the action mechanism model's test results were achieved. The results indicate that the routes between most intervention events passed the 0.05 significance level test.

The research findings have significant implications for enhancing campus sports culture, directing college students toward self-regulation, and encouraging them to adopt healthy physical activity habits. The following measures were proposed to improve college students' sports behavior, and awareness, based on the experimental findings: (1) Establish a college network management system and strengthen oversight of all media; (2) Assist students in developing a habit of reading all-media sports information; (3) Integrate all media and physical education to create a new sports curriculum system; (4) Control all media publicity and expedite the development of campus sports culture. Additionally, the research should be strengthened in the following areas: the process of connotation should be clarified, the disturbance events should be more particular, the influencing elements should be refined, and the system dynamics should be examined.

7. The Study's Implications

This study has theoretical and practical consequences for how college students behave concerning support. To begin, this study fills an academic need in the literature by examining the effect of mobile internet on the sports behavior of college students. This study makes the largest contribution to the literature because it tackles a complex subject and effectively provides a deep insight into the study. Second, because this work is intended to be more practical than theoretical, it has practical consequences. This study demonstrates the critical importance of mobile internet in college students' sports activities. This study indicates that college students can raise awareness through good mobile internet usage, motivating them to prioritize their physical health for a brighter future.

8. Future Direction

This study focuses on the role of mobile internet in identifying college students' sports behaviors. Future research should examine the role of extrovert personality qualities, time management, and sports awareness to understand their effect on sports activities better. Additionally, if these factors are highlighted in future research, they will contribute to the literature and practice of college policies.

Acknowledgement

The Social Science Foundation of Hebei Province supported the project, named "Research on the Supply System of 'Internet +' Elementary Education from the Perspective of Accurate Education" (Grant No. HB18JY036).

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