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AN INVESTIGATION OF ONLINE LEARNING READINESS AMONG PHYSICAL EDUCATION STUDENTS IN VIETNAM

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Abstract:
Cardiorespiratory fitness is the ability to maintain moderate or high-intensity efforts for In light of the global Covid pandemic, educational institutions worldwide have shifted to online modalities, presenting both opportunities and challenges. This study offers an in-depth examination of the online learning readiness among students at the Ho Chi Minh City University of Physical Education and Sports in Vietnam. Drawing from comprehensive data, we assess critical factors determining successful online learning experiences. These factors include the availability and adequacy of students' technological equipment, their personal internet access quality and reliability, the specific online learning intentions and motivations of the 14th intake students, and the hurdles they encountered when interfacing with the learning management system. Additionally, the research sheds light on potential pedagogical adjustments and infrastructural enhancements that can be made to streamline the transition. By discerning the precise state of online learning preparedness and the challenges faced, this research not only gauges the current state of affairs but also provides actionable insights aimed at optimizing the effectiveness of digital instruction at the Ho Chi Minh City University of Physical Education and Sports.

Keywords: online teaching, blended learning, physical education, educational technology

1. Introduction

The onset of the Covid-19 pandemic ushered in an era of unprecedented challenges for the global educational landscape. As the virus spread swiftly across continents,

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educational institutions—from primary schools to tertiary universities—were compelled to shut their doors, upending traditional teaching and learning paradigms. The consequential shift to remote learning marked an exigent transition, with educators and students alike grappling with the abrupt change. Yet, within this milieu of disruptions and uncertainties, emerged an unmistakable silver lining. The imposed restrictions inadvertently spotlighted the potential and resilience of online learning, offering a viable alternative to the conventional classroom experience. The juxtaposition of these two modalities – online versus traditional learning – began to foster renewed discussions about the future of education. Moreover, the pandemic situation accentuated the importance of adaptability and flexibility in our educational models [14]. However, the success of online learning is contingent upon a myriad of factors. Beyond the evident need for robust institutional infrastructure and well-curated educational resources, the transition's effectiveness hinges on a well-orchestrated synergy between institutions, educators, and learners [8]. While educational bodies bear the onus of deploying user-friendly and efficient learning management systems, educators must curate and deliver content suited for digital dissemination. Simultaneously, the onus is on learners to ensure they are equipped—both in terms of hardware and adaptability—for this novel learning approach. The habits, readiness, and digital literacy of students become cornerstones for ensuring the seamless and impactful execution of teaching activities in the virtual realm.

2. Literature Review

2.1 Modern Learning Modalities

In the contemporary era marked by rapid technological advancement, traditional educational paradigms are undergoing significant evolution, adapting to integrate digital tools and platforms. A deep dive into the literature reveals the emergence and maturation of diverse learning modalities tailored to cater to a myriad of needs and contexts.

E-learning stands out as a foundational concept in this digital shift. According to references, e-learning encompasses educational experiences facilitated and augmented by electronic technologies [1]. This can span a vast spectrum, from internet-based platforms to the inclusion of more traditional electronic mediums like television and video tapes. The incorporation of intelligent teaching systems and computer-based training further deepens the richness of e-learning, offering tailored and responsive learning pathways. The essence of e-learning lies in its ability to harness the ubiquitous nature of the internet, coupled with the immersive capabilities of digital multimedia, to craft engaging and widely accessible educational experiences [5].

On a more specialized note, the literature brings forth the concept of m-learning or mobile learning. Rooted in mobility and immediacy, m-learning, as highlighted by sources, is facilitated by the use of mobile devices with wireless capabilities [2],[3]. Devices such as smartphones and tablets transcend their roles as communication tools to become portable educational gateways. This transformation empowers learners with the autonomy to delve into educational content at any time and from any location. This

modality exemplifies the dissolution of traditional educational barriers, promoting spontaneous and flexible learning sessions.

Lastly, straddling the realms of digital and physical education is the concept of blended learning. As outlined by experts, blended learning emerges as a balanced confluence of online and face-to-face teaching techniques. Courses crafted on the blended learning model might employ online tools for various educational purposes while preserving in-person sessions for activities that benefit from direct human interaction, such as collaborative projects or intricate discussions [4]. This holistic approach acknowledges the undeniable merits of digital tools in enhancing educational experiences, while also emphasizing the timeless value of direct human engagement in learning.

Collectively, these modern learning paradigms underscore the dynamism and adaptability of today's educational landscape. Each offers distinct advantages and presents unique challenges, reflecting the multifaceted nature of contemporary learning needs and preferences.

2.2 Forms of Online Teaching

Blended learning can be defined as the combination of various pedagogical methods or teaching approaches, such as self-paced learning, collaborative learning, tutor-supported learning, or traditional classroom teaching [5] [6] [7] This structured educational program involves students learning at least part of the content through digital and online media. Although blended learning encompasses both aspects of traditional face-to-face and online learning, they are not mutually exclusive [8]. Instead, this approach combines methods from both aspects into a continuous teaching method that connects learning activities [9] [10] [11][12][13]. Other researchers highlight the 'meaningful integration' between online and face-to-face learning [10] [5][14][15], suggesting that blended learning is not a linear teaching approach. In terms of technology, blended learning encompasses a range of educational technologies through which students can learn outside the classroom and interact with the curriculum via online learning management systems [8]. While there are different perspectives on what should be included within the scope of blended learning, some prominent characteristics are as follows:

- Blended learning combines several online learning forms with offline interaction [14][16].
- Blended learning enhances learners' independent work capabilities. Students can self-study and use materials and resources provided to them in ways that best suit their needs [17] [13] [18].
- Interaction among learners in online courses is crucial. The success of student participation in online classes greatly depends on the extent to which they interact with others in the online environment [9] [19]
- Learner support is crucial for online activities. Instructors participating in these programs often provide all the necessary help and support learners need through both offline meetings and online solutions [9] [20]

Given the context of physical education, we have chosen a blended teaching approach, combining online and face-to-face learning. Online learning focuses on theoretical content, while face-to-face learning concentrates on practical content. Prominent researchers such as [21] [8] [22] have explored the impact of blended instruction on learners' writing performance. [23] investigated the integration of a Learning Management System (LMS) like Moodle into an existing English writing program based on constructivist pedagogy. By implementing Moodle's Content Management System (CMS) technologies into the writing course, teachers benefit in organizing, delivering, communicating, and assessing student work. Similarly, [21] examined the application of Moodle in establishing a mixed badminton training program at the Ho Chi Minh City University of Physical Education and Sports. The findings showcased Moodle's effectiveness as a teaching and learning tool, enabling effective curriculum alignment, communication channels, and comprehensive statistical reporting with students through its writing module.

3. Methodology

The research was anchored within the digital confines of the Learning Management System (LMS) at the Ho Chi Minh City University of Physical Education and Sports, with a specific focus on the platform "dosports.online." This platform plays a crucial role in the university's educational offerings and procedures. The study concentrated on a select group of learners, comprising 181 students from the 14th intake who were enrolled in a blended learning module centered on badminton. By zeroing in on this group, the intention was to glean insights from a consistent learning environment and curriculum, ensuring the derived data maintained uniformity in its context.

To obtain a comprehensive understanding of online learning readiness among these students, a multi-dimensional research approach was employed. Initially, a deep dive into existing documents related to the LMS, course outlines, and other relevant materials was undertaken, synthesizing the accumulated information to establish a foundational grasp of the university's digital learning setup. Following this, surveys were disseminated among the students. These were carefully crafted to draw out both qualitative and quantitative feedback on their experiences, challenges, and interactions within the online learning framework. Finally, to transform the collected data into meaningful findings, an exhaustive statistical analysis was carried out. This analytical phase aimed to identify discernible patterns, correlations, or trends, presenting a nuanced yet objective overview of online learning readiness within the Ho Chi Minh City University of Physical Education and Sports.

4. Results and Discussion

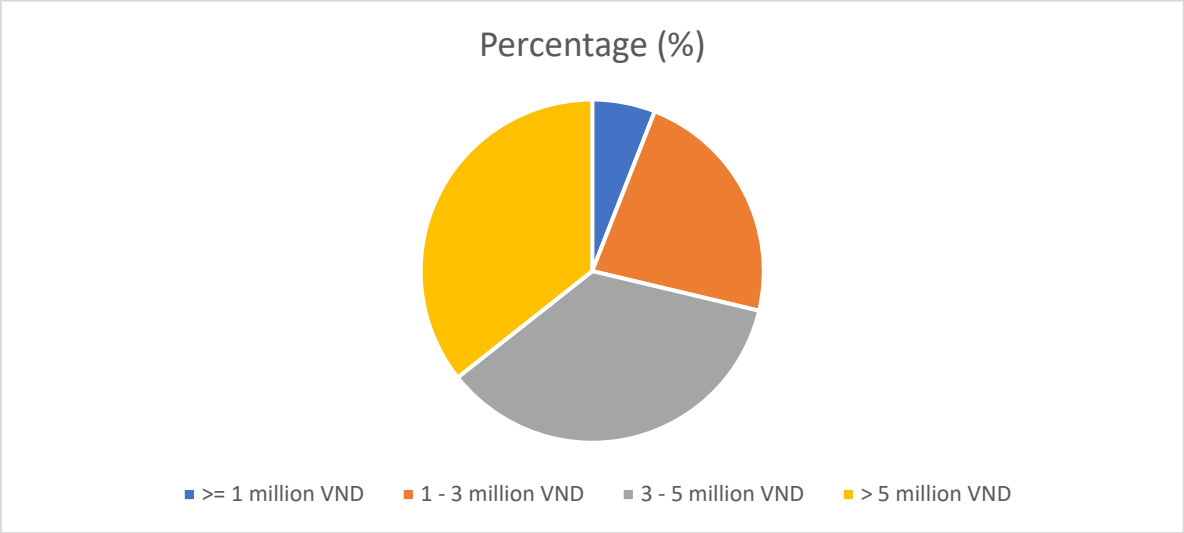
4.1 The Current State of Equipment Preparedness among Students Engaged in Online Learning

Online training demands a reasonable level of preparation in terms of mobile devices and internet connectivity by learners. The study conducted a survey among the participants regarding their possession of personal mobile devices, internet connectivity, and the purpose of engaging in the blended learning badminton course for the 14th intake of students. The results are outlined as follows:

Table 1: Smartphone Value Distribution among 14th Intake University Student

Smartphone Value	Number of Students (n)	Percentage (%)
>= 1 million VND	10	6
1 - 3 million VND	41	23
3 - 5 million VND	65	36
> 5 million VND	65	36

Chart 1: Statistics of Mobile Devices among 14th Intake University Students



The statistics demonstrate that on average, each student possesses a mobile device to cater to their personal needs. Notably, devices with relatively high values are prevalent, especially in the segment above 5 million VND, with 65 students utilizing them, equivalent to 36%. The range of 3 to 5 million VND also sees considerable usage, with 65 students, or 36%, employing devices within this range. In the 2-3 million VND range, 41 students, accounting for 23%, use devices, and the lowest utilization is observed in the segment below 1 million VND, with 10 students, or 6%.

With the rapid expansion of the mobile device market in recent years, in the 2 - 3 million VND range, users can possess devices with comprehensive functions and powerful specifications (Screen: 6.5", HD+; Chip: Snapdragon 632, 8 cores; RAM: 3 GB; Internal Memory: 32 GB; Rear Cameras: Main 13 MP & Secondary 8 MP, 2 MP; Front

Camera: 8 MP; Battery: 5000 mAh, fast charging). Therefore, it's evident that the majority of students from the 12th and 14th intakes possess mobile devices equipped with various features, not only to meet personal entertainment needs but also to utilize digital learning resources and engage in online education offered by the university. This is a crucial prerequisite for the ongoing implementation of technology-enhanced learning initiatives at the university.

4.2 The Current State of Personal Internet Access (3G/4G) on Mobile Devices among 14th Intake University Students at Ho Chi Minh City University of Physical Education and Sports

Despite proactive efforts by Ho Chi Minh City University of Physical Education and Sports to enhance equipment and network infrastructure, a large number of students accessing the school's Wi-Fi simultaneously can lead to network congestion or interruptions in the learning process. This is especially evident during technology-enhanced learning activities where learning is conducted on-site and demands individual internet access. As a result, we conducted a survey to investigate whether students from various intakes participated in online learning while having personal internet access (3G/4G). The survey results are as follows:

Table 2: Statistics of Personal Internet Access (3G/4G) Usage among 14th Intake University Students

Intake	3G/4G Usage	Percentage (%)	No 3G/4G Usage	Percentage (%)
ĐHK14	107	59	74	41

Through the survey, we observed that the percentage of students using 3G/4G for internet access is 59%, while those not using it constitute 41%. Initial investigation indicates that, during the early stages of the Covid-19 pandemic, most students had not yet transitioned to online learning. Consequently, the adoption of 3G/4G internet access was not prevalent as many students relied on Wi-Fi for network connectivity.

4.3 The Current State of Network Usage Purposes among 14th Intake University Students at Ho Chi Minh City University of Physical Education and Sports

In the present era, an improved standard of living has led students to equip themselves with various technological devices that serve both educational and recreational needs, which have become essential aspects of daily life. Thus, the question arises: for what purposes do they primarily use these devices, and how frequently?

Through a survey employing a scale from 1 to 5, representing usage frequency levels ranging from "very rarely" to "very frequently," we gathered data on the network usage habits of two groups of badminton students from the 14th intake at Ho Chi Minh City University of Physical Education and Sports. The purposes observed included playing games, reading news, engaging with social media, and academic activities. The results are summarized in the following table:

Table 3: Statistics of Network Usage Purposes among 14th Intake University Students (n=181)

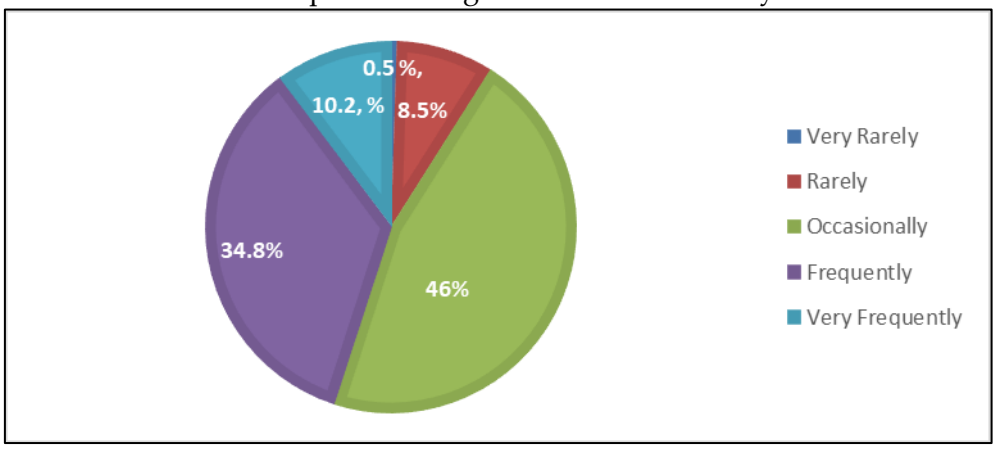
Network Usage Purpose	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently	Total Score	Percentage
Playing Games	15	49	79	29	9	511	56.5%
Reading News	1	18	95	53	14	604	66.7%
Engaging with Social Media	1	21	56	82	21	644	71.2%
Serving Academic Activities	3	25	90	51	12	587	64.9%

The data illustrates the distribution of frequency levels for various network usage purposes among the 14th intake students. These purposes encompass gaming, staying informed through news, engaging with social media, and utilizing networks for academic endeavors.

According to the survey results presented in the dissertation, the majority of students utilize the network for various purposes. Notably, they engage in activities such as using social media (71.2%), reading news (66.7%), studying (64.9%), and playing games (56.5%). Therefore, in addition to entertainment, the usage of mobile devices for educational purposes has started to gain attention among the students. Although the percentage of students using devices for educational purposes is lower compared to activities like social media and news consumption, the outcomes indicate that students are conscious of using mobile devices for learning. This dispels any doubts about their usage being solely for entertainment. This positive trend is significant, especially considering that before the outbreak of Covid-19, most young individuals were not accustomed to using mobile devices for learning; rather, they primarily employed them for entertainment.

With a substantial percentage of 64.9% of students habitually using mobile devices for educational purposes, it demonstrates that students are gradually adapting to the trend of online learning. This aligns with the current state of education in Vietnam. In this survey, we also conducted an analysis of the extent of mobile device usage for educational purposes, yielding the following results:

Chart 2: Statistics of Frequency of Network Usage for Educational Purposes among 14th Intake University Students



The chart reveals that the majority of students only occasionally use mobile devices for educational purposes, constituting 46% of the respondents. In terms of frequency, 45% of students fall into the "frequent" and "very frequent" usage categories combined. Conversely, a minimal 0.5% of students seldom use mobile devices for learning, and 8.5% of students use them rarely.

The survey results indicate that the consistent and very frequent use of mobile phones for studying remains relatively low among students. A substantial portion of students only use their devices for learning on an occasional basis. This issue is of concern to administrators and educators, who need to investigate the underlying reasons and formulate strategies to enhance the habit of regular device usage for academic purposes, rather than predominantly for social media and news consumption.

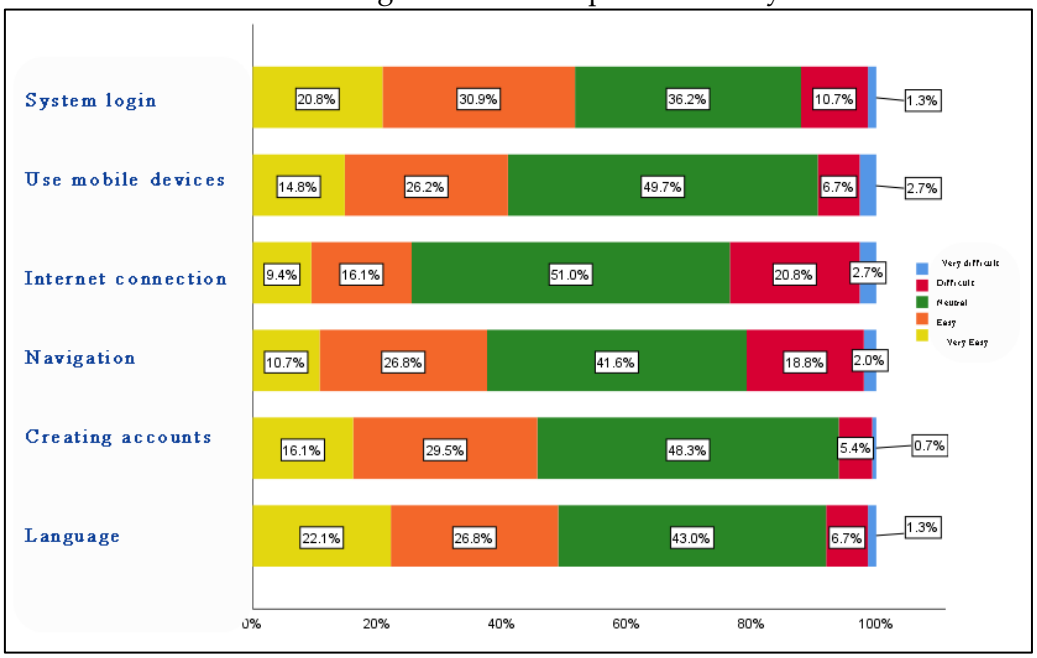
4.4 Current Usage of the dosports.online Online Learning and Management System by Students of the University of Physical Education, Ho Chi Minh City

To comprehend the challenges students face while utilizing the dosports.online system, the thesis conducted a survey among the experimental group of 14th intake students after a period of usage. Employing a Likert 5-scale question with options ranging from "Very difficult = 1, Difficult = 2, Neutral = 3, Easy = 4, Very easy = 5," we collected 149 responses. After processing the data using SPSS software, the average scores for students' perceptions of the difficulties within the dosports.online system were depicted in Table 4.

Table 4: Average Difficulty Ratings of Students When Using the LMS System

	N	Minimum	Maximum	Mean	Std. Deviation
Language within the system	149	1	5	3.62	.949
Account registration	149	1	5	3.55	.850
System operations	149	1	5	3.26	.953
Internet connection	149	1	5	3.09	.922
Use of mobile devices	149	1	5	3.44	.918
System login	149	1	5	3.59	.980

Chart 3: Average Difficulty Ratings of Students When Learning within the dosports.online System



According to the data from Chart 3, we can observe that among the 149 surveyed students, more than 50% of them find logging into the dosports.online system to be easy (30.9%, M=3.59, SD=0.980) and very easy (20.8%, M=3.59, SD=0.980). Additionally, 36.2% of students perceive it as normal, while only 12% of students find the system login to be difficult or very difficult. Overall, students generally consider the system login process to be relatively straightforward. Similarly, 41% (M=3.44, SD=0.918) of surveyed students find using mobile devices to access the system to be very easy or easy; 49.7% (M=3.44, SD=0.918) of surveyed students encounter no difficulties when accessing the system via mobile devices. Only a very small percentage of students face challenges in this regard (9.4%, M=3.44, SD=0.918).

Regarding the process of registering an account within the system, the majority of students also find it favorable, with 16.1% (M=3.55, SD=0.850) finding it very easy, 29.5% (M=3.55, SD=0.850) finding it easy, and 46.3% (M=3.55, SD=0.850) considering it normal. Similar positive responses can be seen in the ease of using the system's language, with 22.1% (M=3.62, SD=0.949) finding it very easy, 26.8% (M=3.62, SD=0.949) finding it easy, and 43% (M=3.62, SD=0.949) considering it normal.

Furthermore, according to the data from Table 4 and Chart 3, it's evident that students encounter higher difficulties with internet connectivity and system operations. The percentage of students facing difficulty with the internet is 20.8% (M=3.09, SD=0.922), and only 2.7% (M=3.09, SD=0.922) find it very difficult. Similarly, the percentage of students encountering difficulties with system operations is 18.8% (M=3.26, SD=0.953), and only 2.0% (M=3.26, SD=0.953) find it very difficult. This is confirmed through open-ended responses from students about the challenges they face during online learning, such as network connectivity issues or difficulties in using the LMS system.

Based on the survey findings, it's evident that many students encounter difficulties in online learning, especially in terms of internet connectivity. This is particularly pronounced for students in remote areas. Addressing these challenges requires cooperation among multiple parties: students, instructors, and the institution. Additionally, the low usage rate of mobile devices and internet for learning purposes underscores the need for collaboration with relevant departments to enhance students' awareness of using mobile devices and the internet for learning.

5. Recommendations

The University of Physical Education and Sports has made commendable strides in advancing digital education with the introduction of their online LMS system. However, mere technological development is only one facet of the broader shift towards a comprehensive online teaching paradigm. It's imperative for the institution to accompany this technological framework with well-defined regulations and guidelines tailored for online teaching. Such a foundational framework can act as a beacon, guiding both instructors and students as they navigate the intricacies of this new teaching model. For the faculty, having a clear set of guidelines can demystify the online teaching process, presenting best practices, pedagogical strategies, and potential pitfalls. These regulations can serve as a blueprint, empowering instructors with the knowledge and confidence to leverage the digital platform to its fullest potential. On the students' side, this transition isn't just about logging into a system; it's about adapting to a wholly different learning environment. Thus, a synergistic effort between the university administration and the teaching staff is crucial. Together, they can orchestrate initiatives aimed at elevating students' awareness regarding the nuances of online learning. This can be achieved through meticulous course development that caters to diverse learning styles, curating instructional materials that resonate with the digital medium, and fostering open communication channels. Such channels not only address queries but also cultivate a sense of community and belonging among students, mitigating the isolation often associated with remote learning.

In essence, while the development of a robust online LMS system is a laudable step forward, the holistic transition to online teaching demands an intricate balance of technological infrastructure, pedagogical innovation, and proactive communication.

6. Conclusion

The University of Physical Education and Sports in Ho Chi Minh City has made a reasonably good preparation for online teaching and learning in response to the Covid-19 pandemic. The university has established an online learning management system based on Moodle with the domain name dosports.online and upgraded its infrastructure to support online teaching and learning.

On the learners' side, most of the students from the K14 cohort have equipped themselves with mobile devices for learning activities. However, personal internet (3G, 4G) is only used by about 60% of the students. The main purposes for using the internet among students are social networking (71.2%) and reading news (66.7%), while learning activities only reach a usage rate of 64.9%. The frequency of using the internet for learning is relatively low, at 34.8%. Learners encounter difficulties in participating in online learning, particularly with internet connectivity and using tools within the dosports.online system.

Conflict of Interest Statement

The authors of this article declare that they have no potential conflicts of interest with respect to the research, authorship, and/or publication of this article. Specifically, the authors declare that they have no financial or personal relationships that could inappropriately influence or bias their work. Furthermore, the authors have no affiliation with any organization or entity with a financial or personal interest in the subject matter discussed in this article. The authors confirm that they have followed the guidelines of their institutions regarding conflicts of interest and declare that there are no other conflicts of interest to report.

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