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The Impact of the Sports World on Campus Application on the Basic Athletic Ability of College Students

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Abstract

Background and Aim: In order to improve the physical fitness and athletic ability of college students, many colleges and universities have introduced the Sports World on Campus application, aiming to improve the effectiveness of physical education teaching through digital means.

Materials and Methods: A quasi-experimental design was used to conduct a 10-week experiment on 90 freshmen at Zhejiang Business College through purposeful sampling. The treatment group (N=45) was trained through the "Campus Sports World" app, while the control group (N=45) was trained through traditional teacher-led physical education methods. Pre-test and post-tests were conducted according to the National Physical Fitness Testing Standards, and experimental data were analyzed using SPSS for mean, standard deviation, independent samples t-test, and paired samples t-test.

Results: The results showed that both groups of students improved in speed, explosiveness, endurance, and flexibility through digital intervention. However, the experimental group's data were significantly higher than those of the control group, with females showing particularly significant improvements.

Conclusion: The study shows that the Campus Sports World app significantly improves college students' speed, explosiveness, endurance, and flexibility through personalized training plans and real-time feedback, with female students showing particularly significant improvement. Compared with traditional methods, it can improve students' athletic abilities more in the same amount of time. Although traditional methods have limited effectiveness in improving athletic ability, combining them with this app can optimize the effectiveness of physical education.

Keywords: Higher Education; Physical Education; Sports World on Campus; Athletic Ability

Introduction

Most colleges and universities in China use data from Campus Sports World as part of the basis for evaluating college students' end-of-term physical education grades, so it is necessary to verify the validity of Campus Sports World. The integration of technological innovations is fundamentally transforming societal structures, with educational systems experiencing significant paradigm shifts in pedagogical approaches. Within physical education curricula, emerging digital solutions ranging from wearable biometric trackers to AI-driven fitness applications are being progressively adopted (Cheng & Yin, 2019; Anthony, 2024). This digital transformation has positioned sports-oriented mobile platforms as crucial facilitators in modernizing collegiate physical training methodologies. Contemporary studies reveal concerning trends regarding deteriorating physiological indicators among university populations. Statistical analyses demonstrate marked reductions in core physical competencies, including muscular endurance, cardiovascular capacity, and kinetic flexibility. This decline has prompted governmental intervention through the implementation of the National Fitness Initiative (2016-2020), establishing standardized evaluation metrics for academic institutions. The protocol mandates comprehensive physiological assessments encompassing speed (50m), endurance (800/1000m), explosiveness (standing long jump), and flexibility (sit forward), with academic consequences tied to achievement benchmarks. Current research priorities focus on developing evidence-based interventions that synergize technological applications with traditional training modalities. Proposed strategies emphasize three key dimensions: 1) Implementing IoT-enabled monitoring systems for real-time biomechanical feedback, 2) Designing gamified fitness applications to enhance exercise adherence, and 3) Integrating virtual reality simulations for skill acquisition enhancement. These technological interventions aim to address motivational deficits while optimizing training efficacy through data-driven personalization. The standardization framework

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established by national health authorities provides quantifiable parameters for assessing intervention effectiveness. Longitudinal data collection through these mandated evaluations enables systematic tracking of program impacts on population health metrics, facilitating iterative improvements to physical education models. This dual approach, combining regulatory oversight with technological innovation, represents a multifaceted response to contemporary public health challenges in academic environments. (Liu et al., 2022).

In summary, this study aims to systematically evaluate the impact of the Campus Sports World app on college students' basic athletic abilities, bridging the gap between emerging digital tools and traditional physical education goals. By quantifying changes in speed, endurance, explosiveness, and flexibility in an IoT-supported, reality-enhanced training environment, we aim to validate the effectiveness of these technological interventions. The insights gained will inform scalable, data-driven strategies for integrating digital innovation into physical education.

Objectives

1. Quantitatively evaluate the impact of the Campus Sports World app on college students' basic athletic abilities, such as speed, endurance, explosiveness, and flexibility, and compare it with the training effects of traditional teaching models. Verify its relative advantages through data differences before and after the experiment.

2. Through rigorous analysis of these disparities, the study sought to deliver empirical findings on the benefits of integrating advanced technology into physical education programs.

Literature review

This study is grounded in constructivist learning theory while incorporating a theoretical synthesis with the Task-Technology Fit (TTF) framework (Alyoussef, 2023). Initially developed to examine technology utilization dynamics, the TTF model emphasizes the critical relationship between technological functionalities and users' task requirements. This methodology provides a structured approach for evaluating technological effectiveness in organizational contexts by analyzing the coherence between digital tools and the operational workflows they aim to optimize (Hidayat et al., 2021). Constructivist educational philosophy emphasizes learner-centered approaches where knowledge acquisition occurs through active engagement with authentic challenges and reflective practice. The theory advocates for experiential learning methods - including practical experimentation and problem-solving in realistic contexts - coupled with metacognitive processes where learners articulate their evolving conceptual understanding. Educators following this paradigm systematically assess learners' prior knowledge, design targeted interventions to address cognitive gaps, and scaffold learning experiences that progressively build upon existing mental frameworks. Central to constructivist theory is the principle that knowledge cannot be passively received but must be actively reconstructed through individual cognitive processes and social interactions (Mishra, 2023). Although constructivist theory and Task-Technology Fit (TTF) are theories from two different fields, it was integrated into the supporting theories of this study by emphasizing co-construction, participation, and the idea that technology adaptation is a social process rather than a single individual act (Marikyan & Papagiannidis, 2023). Such integration contributes to a more comprehensive understanding of the process of technology adaptation and application in this study. Based on the theories related to this study, the four corresponding variables, namely speed, explosiveness, endurance, and flexibility, were developed by matching the basic movement principles of movement mechanics and movement biology to improve basic athletic ability and incorporating the test components in the National Systematic Health Testing Standards (Figure 1).

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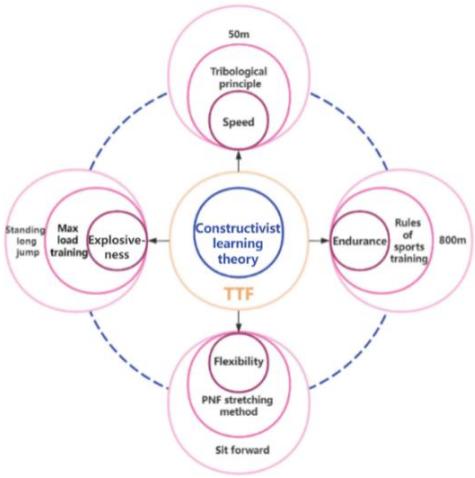

Figure 1 The relationship between constructivist learning theory and task technology matching theory, and the variable

Conceptual Framework

This study's conceptual framework (Figure 2) integrates the experimental design and theoretical foundations to evaluate the impact of the Sports World on Campus application on students' basic athletic abilities. The framework comprises two parallel groups:

Control Group: Engaged in traditional teaching methods for physical education, focusing on instructor-led demonstrations and standardized training programs for speed (H1), explosiveness (H2), endurance (H3), and flexibility (H4). No technological intervention was applied.

Treatment Group: Combined traditional teaching with the Sports World on Campus application, which provided personalized exercise plans, real-time feedback, and gamified content to enhance the same four athletic abilities (H1–H4).

The framework further incorporates motivational factors (intrinsic and extrinsic motivation) as mediating variables, measured through post-intervention questionnaires in the treatment group. These factors reflect how the app's interactive features influenced students' exercise adherence and performance.

The theoretical underpinning aligns with Task-Technology Fit (TTF) theory, emphasizing the congruence between the app's functionalities (e.g., feedback, customization) and the students' training goals. Simultaneously, constructivist learning principles are embedded, highlighting active engagement, self-directed practice, and reflective learning facilitated by the app.

Outcome Comparison: Pre- and post-test data for both groups were analyzed to compare improvements in athletic abilities, while motivational insights from the treatment group contextualized the app's role in fostering exercise habits.

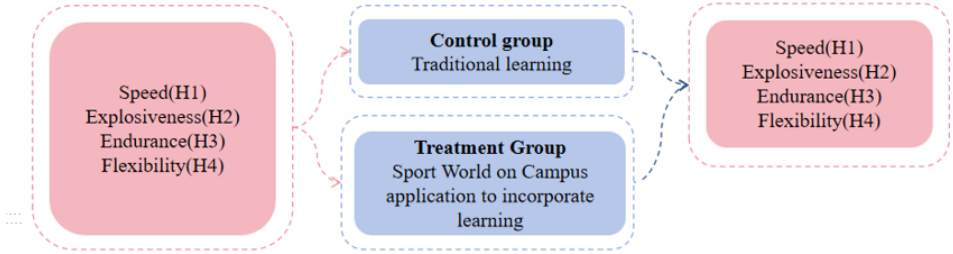

Figure 2 Conceptual Framework

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Methodology

Population and sample group

The sample for this research was drawn from the Art and Design program at the School of Art and Design, Zhejiang Business College, where the researcher was enrolled. The students, who had completed high school physical education and had no professional sports experience before enrolling in the program, were divided into two parallel classes based on similar male-to-female ratios, and the treatment group applied for the program through the Sports World on Campus Application by using the school number given by the school.

Sample population of freshmen. They have some knowledge about their physical fitness and athletic ability. As students are good at utilizing online platforms and some technological means, this research utilizes the Sports World on Campus Application to conduct intervention research on students' sports. At the high school level, they have passed the high school sports basic athletic ability exercise course, basically mastered the four basic athletic abilities, and possess relevant sports knowledge, but there are still deficiencies in further research, exercise, and mastery of the four basic athletic abilities.

Research tools

The research tools for this research were performance tests and questionnaires, which were derived from the National Student Physical Fitness Standard Scoring Rules (college student group) implemented in China.

This standard comprehensively evaluates the physical fitness level of students in terms of physical form, physical function, physical fitness, and athletic ability. It is an educational tool to promote the development of students' physical health and encourage them to actively engage in physical exercise. It also serves as a personal evaluation standard for students' physical health. The National Physical Fitness Standard serves as a research tool and plays a linking role throughout the research. According to the National Physical Fitness Standard Scoring Rules (College Group), students were tested on their basic athletic ability to compare whether or not their basic athletic ability improved with the Sports World on Campus Application intervention.

Data collection and analysis

Data collection was conducted during the final week of the experiment; all assessments were performed by trained professionals to guarantee the precision and reliability of the collected data. The resulting data were subjected to statistical analysis using SPSS software. To evaluate the differences between the experimental and control groups, an independent samples t-test was employed for comparisons before the intervention, while a paired samples t-test was utilized to analyze post-intervention results. These statistical procedures ensured a rigorous examination of the effects of the intervention, allowing for a clear assessment of any significant changes within and between the groups across both time points.

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Number	Variables	Training methods					
		Text	Icon	Text	Icon	Text	Icon
1	Speed	kick-high		jump on one leg			
2	Explosiveness	start from both ends		jumping jacks			
3	Endurance	jump rope		plank support		800/1000m long-distance running	
4	Flexibility	Sit forward		Wrap one's arms around			

Figure 3 Methods of training students in the four basic athletic abilities

Based on a structured teaching cycle that combines content from the Sports Worlds Campus application with real-life lessons. The weekly training schedule includes training in the four basic athletic abilities of speed, explosiveness, endurance, and flexibility, with a different focus each week. Some of the practice movements corresponding to the four basic athletic abilities in the application are listed in Figure 3.

Instructional interventions were implemented through the Sports World on Campus application, utilizing the features provided by the application to systematically guide students in practicing a variety of athletic abilities. The interactive module provides movement instruction, practice guidance, real-time feedback, and progress tracking to ensure that they are practicing at an optimal rate to help students improve speed, explosiveness, endurance, and flexibility. During the last week of the study, students were reassessed for the four basic athletic abilities.

Athletic abilities one: Speed

Speed is the ability of an athlete to complete a certain distance in the shortest possible time. Often assessed through short sprints or explosive movements (Clemente et al., 2023). This paper uses a 50-meter test to test the speed qualities of students according to the National Physical Fitness Test Standards.

Control group: The teacher demonstrates the basic movements of speed training and arranges the training program.

Treatment group: Students in the treatment group utilize the application for speed training. The video instruction provided by the application helps students to master the standards of movements such as “kick-high” and “jump on one leg”, and at the same time monitor the training progress through the counting and recording functions of the application.

Athletic abilities two: explosiveness

Explosiveness is usually the shortest time for the body itself to move to the specified distance. Students in the standing long jump, using the maximum instantaneous energy of physical fitness, to reach the maximum limit distance (Kyung & Park, 2024). This paper tests the explosive power of students using the standing long jump according to the National Physical Fitness Test Standards.

Control group: The teacher demonstrates and explains the basic movements of explosiveness training and arranges the training program.

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Treatment group: students in the treatment group use the simulation video in the application to learn and count the standard movements after the teacher's instruction. The videos in the application provide detailed demonstrations of movements and technical points, such as “abdominal jumping jacks” and “start from both ends”, to help students master the movement standards. The application's feedback feature ensures that students are moving accurately and records the completion of each set.

Athletic abilities three: Endurance

From a physiological point of view, endurance exercise is typically performed at submaximal intensity, with the main purpose of progressively moving the anaerobic threshold, i.e., the beginning of anaerobic metabolism and lactate production, towards higher exercise intensity (Yu, Zhao, Wu, et al., 2023). This paper tests students' endurance through 800/1000-meter runs according to the National Physical Fitness Test Standards.

Control group: teachers arranged and instructed endurance training, including aerobic exercise and high-intensity circuit training.

Treatment group: students in the treatment group utilize the application's outdoor exercise function for jump rope, plank support, and other aerobic exercises. The aerobic exercise video provided in the application guided students to gradually increase the intensity and duration of the workout, while setting the training intensity and providing real-time feedback. In 800/1000-meter races, the application provides voice guidance to remind students to sprint at specific times, helping students control their breathing and improve the effect of exercise.

Athletic abilities four: flexibility

Flexibility is the ability of a joint or series of joints to move through a full, unrestricted, and pain-free range of motion. In this context, flexibility is not solely about the length or extensibility of the muscles and connective tissues but also encompasses the neuromuscular control that ensures movement occurs safely and efficiently (Behm, 2024). This paper tests students' flexibility through the Sit forward according to the National Physical Fitness Test Standards.

Control group: Teachers taught basic flexibility training movements and led students to perform preliminary training.

Treatment group: after the teacher's instruction, students in the treatment group use the virtual characters and videos in the application for further practice. Refer to the stretching videos in the application to perform static and dynamic stretches. Static stretches consist of standing or seated stretches held for 15-30 seconds each to ensure that the student can feel the muscles stretching without causing discomfort. Dynamic stretches such as arm swings are timed and guided by the application to improve joint flexibility and range. Key exercises such as “sit forward” and “wrap one’s arm around” are also explained in detail by videos in the application to ensure that the student performs each movement accurately, and a counting feature is provided to ensure that each movement is performed in the prescribed amount of time.

Each session of the course is adapted to the specific training content and has a corresponding focus, with the Sports World on Campus application playing a supporting role rather than dominating the entire course.

Hypotheses

From the research conceptual framework, four hypotheses were proposed and were to be proven. There were no differences in speed(H01), explosiveness(H02), endurance(H03), and flexibility(H04) scores between students who received traditional instruction and those who received supplemental instruction from the Sports World on Campus application.

Results

Demographic Information

There were 45 students in each of the treatment and control groups, and of the 90 students, 28 were male (31% of the total) and 62 were female (69% of the total). Of these, 88 students, or 97%, were under

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20 years of age, and 2 students, or 3%, were between the ages of 20 and 25. The detailed information is shown in Table 1.

Table 1 Demographic Information of Samples

Group	Variable	Category	Frequency	Percentage
Treatment Group	Gender	Male	15	33.3%
		Female	30	66.7%
		Total	45	100%
	Age	<20	44	98%
		20-25	1	2%
		Total	45	100%
Control Group	Gender	Male	13	28.8%
		Female	32	71.2%
		Total	45	100%
	Age	<20	44	98%
		20-25	1	2%
		Total	45	100%

Table 2 Comparison of the four test scores before the experiment

Group	50-meters	800/1000-meters	Sit forward	Standing long jump
Treatment Group	71.64±9.10	64.26±13.51	70.56±13.11	70.56±13.11
Control group	74.15±9.70	66.18±10.48	74.78±11.15	72.82±12.20
p	0.20	0.45	0.75	0.39

According to the comparison of the data in Table 2, P>0.05, which did not reach the level of statistical significance, indicates that none of the differences in the four basic athletic abilities between the two groups were significant. This provides solid basic data for further exploration of treatment effects in subsequent experiments.

Table 3 Control group speed test data

Gender	Pre-test	Post test	p
Male	79.86±7.60	83.86±8.50	0.08
Female	67.53±6.74	71.16±4.73	0.02

As shown in Table 3, in the control group, analysis of the pre-test and post-test data for the 50-meter dash showed a mean score of 79.86 before treatment and 83.86 after treatment, an improvement of 5%. In contrast, the average pre-test and post-test scores for women were 67.53 and 71.16, respectively, with a significant change in data growth (P<0.05), and although the total score was lower than that of men, the increase was 8.44%, which was higher than that of men. This suggests that women in the control group

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were more effective than men when practicing the speed module. Although both men and women in the control group performed better after treatment than before treatment, this improvement did not reach a significant difference. This shows that the traditional speed practice method is effective in improving the speed quality of students, but the improvement in a short period of time is more limited.

Table 4 Treatment group speed test data

Gender	Pre-test	Post test	p
Male	81.07±10.10	87.92±77.10	0.03
Female	71.34±8.11	77.90±6.31	0.00

According to the analysis of the pre-test and post-test data of the 50-meters sprint event in the treatment group, the mean score of the males before treatment was 81.07, which was improved to 87.92 after treatment, with an increase of 5.38%; the mean scores of the females in the pre-test and post-test were 71.34 and 77.90, respectively, with an increase of 9.20%, which was higher than that of the males. This indicates that in practicing the speed module, the females in the treatment group also practiced more efficiently than the males. Statistical analysis in Table 4 further reveals that there is a significant difference in the improvement of males ($p=0.03$), while the improvement of females is highly significant ($p=0.00$), which indicates that with the help of the Sports World on Campus application, students were able to improve their speed qualities significantly within a short period, especially the females.

Variable two: Explosiveness

Table 5 Control group explosiveness test data

Gender	Pre-test	Post test	p
Male	70.13±16.34	75.06±13.81	0.41
Female	70.76±11.48	75.46±8.51	0.61

According to Table 5 the analysis of the pre-test and post-test data of the control group in the standing long jump event showed that the mean score of males before treatment was 70.13, which was improved to 75.06 after treatment with an increase of 7.02%, while the mean scores of females' pre-test and post-tests were 70.76 and 75.46 respectively, with an increase of 6.64%, and the overall scores were higher than those of males but the increase was slightly smaller than that of males. This suggests that males improved more than females in explosiveness training. Although both males and females in the control group performed better after treatment than before, none of these gains reached a significant difference($p>0.05$). This suggests that although traditional explosive practice methods can enhance students' explosiveness to some extent, the effect of the enhancement in a short period is still limited.

Table 6 Treatment group explosiveness test data

Gender	Pre-test	Post test	p
Male	72.0±13.44	80.38±10.88	0.15
Female	73.15±11.87	83.46±8.88	0.00

According to the comparison of the data before and after the treatment of standing long jump in the treatment group, the mean scores of males before and after the treatment were 72.00 and 80.38 respectively, with an increase of 11.63% before and after the treatment; and the scores of females in the pre-test and post-test were higher than those of males, with the mean scores before and after the treatment being 73.15 and 83.46 respectively, with an increase of 14.09% before and after the treatment. There was no significant difference between the pre-treatment and post-treatment data of the males in the treatment group, and a highly significant difference($p<0.01$) between the pre-treatment and post-treatment data of the females, indicating that the females were better at practicing.

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Variable three: Endurance

Table 7 Control group endurance test data

Gender	Pre-test	Post test	p
Male	61.86±3.73	76.20±12.27	0.05
Female	67.43±8.74	76.43±10.00	0.00

Analysis of the pre-test and post-test data of the 800/1000-meters event in the control group showed that the mean score of the males before treatment was 61.86, which was significantly improved to 76.20 after treatment, an increase of 23.17%; the mean scores of the females in the pre-test and post-tests were 67.43 and 76.43, respectively, with an increase of 13.34%, and their overall scores were higher than those of the males. Statistical analysis showed that there was a significant difference ($p<0.05$) in both males' and females' scores before and after the treatment, and in particular, the improvement in females' scores was highly significant ($p<0.01$). This indicates that after 10 weeks of training in the control group, both males and females made significant progress in endurance qualities. This result not only proves the effectiveness of the training but also reflects that there is still a huge room for improvement in the students' endurance quality, further emphasizing the potential development in Endurance training.

Table 8 Treatment group endurance test data

Gender	Pre-test	Post test	p
Male	61.69±14.49	78.23±10.79	0.00
Female	67.21±9.04	79.43±8.28	0.00

Analysis of the pre-test and post-test data of the 800/1000-meters event of the treatment group showed that the mean score of the male students before treatment was 61.69, which was significantly improved to 78.23 after treatment, an increase of 26.81%; the mean scores of the female students in the pre-test and post-test were 67.21 and 79.43 respectively, with an increase of 18.18%, and the overall score was higher than that of the male students, but with a slightly lower increase. Statistical analysis showed that there was a highly significant difference($p<0.01$) between the scores of both male and female students in the treatment group before and after the treatment, indicating that after 10 weeks of training, the endurance quality of the students in the treatment group made greater progress compared with the control group. This further demonstrates the effectiveness of the Sports World on Campus application program in improving students' endurance.

Variable four: Flexibility

Table 9 Control group flexibility test data

Gender	Pre-test	Post test	p
Male	70.53±13.57	73.13±10.62	0.47
Female	75.66±13.69	80.97±10.49	0.10

The analysis of the pre-test and post-test data of the control group in sit forward test showed that the mean score of males before treatment was 70.53 and slightly improved to 73.13 after treatment with an increase of 3.68%, whereas the mean scores of females in the pre-test and post-test were 75.66 and 80.97 respectively, with an increase of 7.01%, and their overall scores were higher than those of males. This indicates that females in the control group practiced more efficiently than males in the flexibility module. Although both males and females in the control group had better post-treatment data than pre-treatment, none of these improvements reached a significant difference. This suggests that traditional methods of flexibility training can improve students' flexibility qualities to a certain extent, but the improvement is more limited in a short period.

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Table 10 Treatment group flexibility test data

Gender	Pre-test	Post test	p
Male	68.15±10.75	72.30±11.22	0.17
Female	77.46±10.28	83.31±16.22	0.06

Analysis of the pre-test and post-test data of the treatment group in the sit forward test showed that the mean score of the males before treatment was 68.15, which increased to 72.30 after treatment, an increase of 6.08%, while the mean scores of the females in the pre-test and post-test were 77.46 and 83.31, respectively, an increase of 7.29%. Despite some improvement, neither the males' nor the females' scores reached a significant difference before and after treatment. This suggests that after 10 weeks of training, the students in the treatment group had limited improvement in flexibility and may need longer or more focused practice to significantly improve their flexibility qualities. Numerous studies have shown significant differences in the development of flexibility between males and females. In all age groups, females' flexibility is significantly better than males', which may be related to the physiological differences between genders: females usually enter puberty earlier than males, and the development of flexibility is also earlier (Mensch & Ravid, 2022); and after entering puberty, males' muscle growth is greater than females', and muscle mass is much higher than females', and the larger the muscle mass around the joints, the bigger the restriction on the joints' flexibility, which all of these factors together cause the difference in flexibility between genders. Differences in flexibility qualities between genders.

Hypotheses Testing

The central question of this study was whether the Sports World on Campus application would help students improve their basic athletic abilities, and four hypotheses were formulated with a significance level of 0.05. Table 11 summarizes the results of the hypothesis testing in this study.

Table 11 Summary of Hypothesis Testing and Results

Hypothesis	Statement	Result
$H_0$1	There was no difference in speed scores between students who received traditional instruction and those who received supplemental instruction with the Sports World on Campus application.	Rejected
$H_0$2	There was no difference in explosiveness scores between students who received traditional instruction and those who received supplemental instruction with the Sports World on Campus application.	Rejected
$H_0$3	There was no difference in endurance scores between students who received traditional instruction and those who received supplemental instruction with the Sports World on Campus application.	Rejected
$H_0$4	There was no difference in flexibility scores between students who received traditional instruction and those who received supplemental instruction with the Sports World on Campus application.	Rejected

Discussion

Through detailed analysis of the data, it was found that the Sports World on Campus application has shown significant effects in improving the qualities of speed, explosiveness, endurance, and flexibility of college students, especially for female students, which further proves the potential and value of the application in physical education. That also validates the hypothesis at the beginning of the article. The Sports World on Campus application has a significant effect on improving the basic athletic ability and

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changing the exercise habits of university students. By providing personalized exercise plans and real-time monitoring functions, the application helps students better understand their physical condition and exercise needs, thus stimulating their motivation and interest in participating in physical exercise. Meanwhile, the application also increases the fun and interactivity of physical exercise through rich sports content and interactive functions, further promoting the formation and consolidation of students' exercise habits. At the same time, the traditional training methods were also effective in improving the students' basic athletic ability, but the improvement was limited. Therefore, combining traditional training methods with the Sports World on Campus application may lead to better teaching results.

Conclusion

In summary, the 10-week quasi-experimental study showed that students who used the Campus Sports World app achieved significantly greater improvements in speed, explosiveness, and endurance, as well as moderate improvements in flexibility, while students in the traditional teacher-led program did not achieve these levels, with female participants showing particularly significant benefits. Although the Treatment Group outperformed the Control Group in all four core athletic indicators (speed, explosiveness, endurance, and flexibility) (rejecting the H_0 hypothesis in the comparisons of speed, explosiveness, endurance, and flexibility), the improvement in flexibility did not reach statistical significance and did not fully meet our pre-set improvement goals. This shortcoming may be due to the relatively short duration of the intervention and the inherent gradual nature of flexibility development, suggesting that longer practice time and more specialized stretching programs are needed to fully realize the potential of the app.

In addition, it is also found that the Sports World on Campus application makes up for the shortcomings of traditional physical education teaching to a certain extent. Traditional physical education often focuses on skill transfer and physical training, but neglects the cultivation of students' interests and habits. Through personalized exercise plans and interactive functions, the application helps students build up their interest and love for sports, thus promoting the formation and consolidation of students' sports habits.

Recommendation

(1) Colleges and universities should increase their efforts to promote digital Sports applications such as Sports World on Campus and encourage students to use these applications for physical exercise.

(2) Physical education teachers should strengthen the guidance and supervision of students to ensure that students can use these applications for exercise scientifically and effectively.

(3) Digital sports application developers should continuously optimize and improve the functions and design of the applications to enhance user experience and satisfaction.

(4) Future research should further explore the application effects of digital sports applications in various populations and environments to provide a more comprehensive scientific basis for sports education.

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