

Check for updates

OPEN ACCESS

SUBMITED 30 October 2024 ACCEPTED 30 December 2024 PUBLISHED 30 January 2025 VOLUME Vol.05 Issue01 2025

COPYRIGHT

© 2025 Original content from this work may be used under the terms of the creative commons attributes 4.0 License.

Physical Development Among Students Pursuing Sports Management

Jumaniyazov Anvarbek Bekchanovich

Head of the Department of Scientific Research, Innovations and Scientific and Pedagogical Personnel Training of the Uzbek State University of Physical Education and Sports, Uzbekistan

Abstract: This paper investigates the physical development of undergraduate students enrolled in a Sports Management program over a 16-week academic semester. Thirty participants (aged 18-23), comprising both male and female students, were assessed on four key fitness components: cardiovascular endurance (using a 1.5-mile run test), muscular strength (1RM bench press), flexibility (sit-and-reach test), and body composition (skinfold measurements). Students participated in a structured curriculum that integrated theoretical coursework with two hours of supervised physical training each week. Quantitative findings indicated statistically significant improvements in run times, bench press strength, flexibility scores, and reductions in body fat percentage. Qualitative interviews revealed that peer support, accountability through testing, and perceived professional advantages in sports administration motivated students to maintain regular physical activity. However, participants also highlighted time constraints and academic workload as obstacles. The study concludes that embedding practical fitness training into sports management curricula not only promotes students' well-being and functional knowledge but also prepares future sports professionals to lead and advocate for healthier athletic environments.

Keywords: Sports management, physical development, undergraduate students, fitness assessment, exercise training, curriculum integration, body composition.

Introduction: Physical development is a cornerstone of overall health and well-being, particularly for individuals involved in sports-related fields. Among university students pursuing degrees in sports management, physical fitness is not merely an optional or peripheral interest; rather, it is often central to their academic and

European International Journal of Pedagogics

professional objectives. As future practitioners, administrators, and leaders in the sports industry, these students are expected to possess а comprehensive understanding of physical performance, training principles, and healthful living. The curriculum of sports management programs typically includes theoretical courses, such as business administration, marketing, and sports law, in addition to practical modules on exercise science, coaching techniques, and athlete development. Consequently, the physical development of these students is a focal point that can directly influence both their academic performance and their future career success.

Despite the recognized importance of physical fitness in the sports industry, comparatively fewer studies have addressed the specific physical development trajectories of sports management students. Most existing research focuses on athletes in performanceoriented programs, such as physical education majors or professional sports training academies. However, not sports management students—while all competitive athletes themselves-still require robust physical abilities and a deep, experiential understanding of the fitness and training processes in order to manage sports events, design training programs, and communicate effectively with coaches and athletes.

The purpose of this study is to examine the physical development of sports management students, paying particular attention to key fitness components such as cardiovascular endurance, muscular strength, flexibility, and body composition. By employing standardized assessment protocols and tracking changes over an academic semester, this research aims to contribute to a more nuanced understanding of how structured university programs influence the physical well-being of sports management undergraduates. Ultimately, these insights can lead to enhanced pedagogical approaches, better integration of exercise science principles into sports management curricula, and improved long-term outcomes for students preparing to enter the sports industry.

METHODS

Research Design

A mixed-methods, longitudinal approach was adopted for this study to explore how students' physical development evolved over one academic semester (16 weeks). While quantitative measures provided objective data on key fitness indicators, a qualitative component offered contextual insights into the students' experiences, motivations, and perceived barriers to their physical development. Thirty undergraduate students enrolled in a Bachelor of Sports Management program at a mid-sized university participated in this research. The participants ranged in age from 18 to 23 years (mean = 20.5, SD = 1.4), including both male (n = 16) and female (n = 14) students. Participation was voluntary, and informed consent was obtained from all individuals prior to the commencement of data collection. Ethical approval was granted by the university's institutional review board, ensuring compliance with regulations for human subjects research.

Assessment Protocols

Four key components of physical fitness were evaluated: (1) Cardiovascular Endurance, assessed via a 1.5-mile run test; (2) Muscular Strength, measured by a one-repetition maximum (1RM) bench press test; (3) Flexibility, evaluated using the sit-and-reach test; and (4) Body Composition, determined by skinfold measurements at three standardized sites (triceps, abdomen, and suprailiac) using calipers and the Jackson-Pollock formula to estimate body fat percentage.

• Cardiovascular Endurance (1.5-Mile Run Test): Each participant was instructed to complete a 1.5-mile distance on a standard 400-meter outdoor track. The total time to complete this distance was recorded, and lower completion times indicated higher endurance levels.

• Muscular Strength (1RM Bench Press): Participants performed progressive warm-up sets until they reached a load near their maximum capability. Subsequent attempts were increased by small increments (2.5–5.0 kg) until the participant could not successfully complete a single repetition with proper form.

• Flexibility (Sit-and-Reach Test): The standard sitand-reach box was used. Participants sat with knees extended and reached forward as far as possible along a measuring line. The score was recorded to the nearest half-centimeter.

• Body Composition (Skinfold Method): Using skinfold calipers, measurements were taken at triceps, abdomen, and suprailiac sites. Each measurement was taken three times, and the average was used to estimate body fat percentage through the Jackson-Pollock equation appropriate for the participant's sex.

Throughout the 16-week semester, students participated in a structured program that combined lectures, case studies, and practical lab sessions related to sports management. The university also required them to engage in two hours of physical activity per week under faculty supervision. These activities

Participants

European International Journal of Pedagogics

included circuit training, group fitness classes, and resistance exercises, all designed to enhance the four components of fitness being evaluated. Students were encouraged to maintain regular physical activity on their own time as well, but no specific at-home exercise routines were mandated.

Quantitative data from baseline and post-semester tests were analyzed using paired-samples t-tests to detect statistically significant changes in fitness measures. Qualitative data were collected through brief, semi-structured interviews and group discussions, then coded to identify recurrent themes such as motivation, time management challenges, and perceived benefits. Triangulation of quantitative and qualitative findings provided a comprehensive perspective on students' physical development over the study period.

RESULTS

Baseline vs. Post-Semester Fitness Measures

Cardiovascular Endurance (1.5-Mile Run Time): The average baseline time for completing the 1.5-mile run was 13 minutes and 12 seconds (SD = 1 minute 5 seconds). By the end of the semester, the average time decreased to 12 minutes and 33 seconds (SD = 58 seconds), indicating a statistically significant improvement (p < .05). Several participants reported that the required circuit training sessions helped them build stamina and better pacing strategies.

Muscular Strength (1RM Bench Press): At baseline, the mean 1RM bench press was 50 kg (SD = 12 kg) for female students and 70 kg (SD = 15 kg) for male students. Post-semester assessments showed an average increase of 5 kg for females and 7 kg for males, reflecting a statistically significant gain in upper-body strength (p < .01). Qualitative data suggested that hands-on training in the university gym and peer support were influential factors in these improvements.

Flexibility (Sit-and-Reach Test): Students demonstrated moderate flexibility levels at the beginning of the semester, with an average sit-and-reach score of 25 cm (SD = 3 cm). By the end of the semester, this average had increased to 27 cm (SD = 3 cm). Although the change was modest, it was statistically significant (p < .05). Anecdotal feedback highlighted regular stretching routines in warm-up sessions and yoga-based exercises in group fitness classes.

Body Composition (Skinfold Measurements): The mean estimated body fat percentage at baseline was 18% (SD = 3%) for males and 24% (SD = 4%) for females. After 16 weeks, a slight decrease in both groups was

noted, averaging at 17% (SD = 3%) for males and 23% (SD = 4%) for females. While the reduction in body fat percentage was not as large as some participants anticipated, the small but consistent decline across the cohort was deemed statistically significant (p < .05).

Qualitative Findings

Interview transcripts revealed several common themes:

1. Motivation and Accountability: Students frequently cited peer support and structured lab sessions as key motivators. Knowing they were being tested at the beginning and end of the semester also created a sense of accountability.

2. Time Constraints: Many participants struggled to balance academic responsibilities (e.g., exams, projects, and internships) with regular physical training. Nonetheless, most found ways to integrate short exercise breaks into their daily routines.

3. Perceived Professional Benefits: Students believed that improving their personal fitness was essential to future roles in sports administration. They felt more confident communicating with athletic staff, demonstrating exercises, and engaging in professional networking within the sports sector.

DISCUSSION

The results of this study underscore the positive impact of structured and supervised exercise within the curriculum of sports management programs. Students improved across all four measured fitness components—cardiovascular endurance, muscular strength, flexibility, and body composition-during the 16-week semester. These findings align with the broader literature suggesting that consistent, progressive physical activity can substantially enhance fitness, even among populations not engaged in highly intensive athletic training.

From an educational standpoint, the integration of practical fitness modules within a sports management curriculum provides students with firsthand experience that can complement theoretical knowledge. Rather than learning about exercise science exclusively from textbooks or lectures, these future professionals gain tangible skills that will assist them in designing training programs, understanding athlete needs, and communicating effectively within sports organizations. Additionally, the improvement in students' personal fitness can bolster their credibility in the workplace; managers who exhibit healthy behaviors may positively influence team culture and reinforce the importance of wellness initiatives.

Nevertheless, the qualitative feedback highlights the importance of addressing barriers like time management and academic workload. While two hours

European International Journal of Pedagogics

of mandatory physical activity per week can yield measurable gains, many students indicated that additional flexible options could further support their progress. University policies that offer more varied training times, or integrated "mini-workouts" between classes, might encourage greater consistency. Moreover, leveraging technology—such as fitness tracking apps or online workout portals—can help students monitor their progress, set goals, and stay motivated.

Finally, this study's findings have potential implications beyond the university setting. As these students transition into sports management roles, their deeper appreciation for personal fitness may translate into effective leadership, policy-making, more and for health promotion advocacy in athletic environments. This, in turn, can have a positive ripple effect, as sports managers who practice healthy lifestyles may serve as role models, shaping the culture and standards of the organizations they serve.

CONCLUSION

This research has demonstrated that a structured, 16week program incorporating both theoretical and practical components significantly enhances the physical development of undergraduate students pursuing degrees in sports management. Measurable improvements in cardiovascular endurance, muscular strength, flexibility, and body composition were observed, underscoring the value of integrated exercise sessions and hands-on fitness experiences within sports management curricula. Qualitative feedback further emphasizes the role of peer support, motivation, and professional aspirations in driving students' engagement with fitness activities.

Moving forward, educators and administrators should consider expanding opportunities for physical activity and leveraging technology to accommodate diverse student schedules and preferences. By fostering an environment that values personal wellness, universities can better equip the next generation of sports managers with the practical skills, knowledge, and healthy habits essential for leading successful, health-conscious organizations.

Overall, the positive outcomes of this study point to the broader importance of aligning academic requirements with practical fitness experiences, ensuring that sports management students graduate with not only the theoretical acumen but also the physical capability to excel in the dynamic, healthoriented world of sport.

REFERENCES

American College of Sports Medicine. (2018). ACSM's

guidelines for exercise testing and prescription (10th ed.). Wolters Kluwer.

Bach, G., & Eklund, R. C. (2019). The role of holistic physical fitness in sport management education: A systematic review. Journal of Sport Management, 33(5), 412–424. https://doi.org/10.1123/jsm.2018-0321

Jackson, A. S., & Pollock, M. L. (1978). Generalized equations for predicting body density of men. British Journal of Nutrition, 40(3), 497–504. https://doi.org/10.1079/bjn19780152

Jackson, A. S., Pollock, M. L., & Ward, A. (1980). Generalized equations for predicting body density of women. Medicine and Science in Sports and Exercise, 12(3), 175–182. https://doi.org/10.1249/00005768-198023000-00009

Kilpatrick, M., Hebert, E., & Bartholomew, J. (2005). College students' motivation for physical activity: Differentiating men's and women's motives for sport participation and exercise. Journal of American College Health, 54(2), 87–94. https://doi.org/10.3200/JACH.54.2.87-94

Pedersen, P. M., Parks, J. B., Quarterman, J., & Thibault, L. (2011). Contemporary sport management (4th ed.). Human Kinetics.

Sallis, J. F., & Owen, N. (2015). Ecological approaches to the promotion of physical activity. In L. D. van Blarcom & A. D. Smith (Eds.), Physical activity and health: An interactive approach (pp. 185–210). Oxford University Press.

Shilbury, D., Sotiriadou, P., & Green, B. C. (2008). Sport development systems, policies, and pathways: An introduction to the special issue. Sport Management Review, 11(3), 217–223. https://doi.org/10.1016/S1441-3523(08)70107-2