



The Effect of the Varied Style on Learning Basic Stances and Footwork in Foil Fencing for Students

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Abstract: This study examines the influence of different teaching methods on university students at beginner and intermediate levels in learning the fundamentals of foil fencing, particularly stance and footwork. It highlights that traditional instructional approaches may not adequately address individual differences in motor learning, which can limit student engagement and skill development despite their interest in the sport. Objective, The study aims to compare the effectiveness of various teaching methods (such as adaptive learning strategies, task variability, and interactive instruction) with traditional instructor-centered methods in improving students' technical performance and motor skill acquisition in fencing. Method, A sample of 40 University of Diyala students were split into experimental and control groups using an experimental design. Five fundamental fencing abilities were evaluated in pre- and post-tests for both groups: Basic Stance, On-Guard stance, Forward movement (Advance), Retreat, and Lunge technique. Paired and independent t-tests were used to assess the data. Results, According to the findings, the experimental group outperformed the control group in terms of coordination, movement efficiency, and technical execution. Using a variety of instructional approaches greatly improved performance retention, engagement, and skill gain. Conclusion, The research comes to the conclusion that when it comes to improving fencing skills, student-centered and adaptable teaching strategies work better than conventional ones. In order to improve coaching efficacy, it suggests using contemporary teaching techniques and technology-assisted learning, as well as investigating long-term skill retention and applying such approaches across different sports disciplines.

Keywords: Varied Teaching Style, Instructional Methods, Foil Fencing, Skill Acquisition, Motor Learning, And Experimental Design, Adaptive Learning, Sports Pedagogy, Sports Training, Instructional Strategies.

Introduction

Fencing is a sport that involves precision, agility, and strategic thinking. Daven is a trained instructor of the sport of fencing, teaching students the stances and footwork needed to perform larger more advanced moves that are part of the sporting style of the sport ([Mashkoor, 2024](#)). Teaching methods are extremely important to make sure that learners not only understand these basic skills but also get the coordination and reflexes they need to use them fluidly in real life situations ([Mutar & Mohammed, 2024](#)). Fencing

teaching was followed a standard way for the longest time, regardless of the fact that some students learn one way, while others show some similar behaviour. As fencing is multifaceted, there should be investigation into more adaptive teaching techniques that facilitate different ways of experiencing a lesson, enhancing skill learning. The educational research in sports science in the past several years placed much emphasis on effectively combining the innovative teaching methods to improve learning efficiency. The varied teaching style is one such approach; it meets students where they are, accounting for individual differences in learning, and allowing students multiple methods for engaging and mastering skills (Wahhab, 2024). Students are individualized from the common way of teaching, which is to use one teaching style across all students. It is a recognized approach in sports education used to enhance skill retention, motivation, and performance consistency. However, only little evidence has been published to investigate its utility for use in training in fencing, especially for learning basic stances and footwork in foil fencing.

With increasing focus on the importance of dispersed learning techniques in sports education, the relative efficacy of the contrasting teaching style remained unexplored in the learning process of basic stances and footwork in the sport of foil fencing (Green, 2016). However, traditional methods might not completely stimulate pupils with diverse learning preferences, which can result in uneven skill-level development and decreased retention rates.

Therefore, "Does varied teaching style have a significant and positive impact on students' learning of basic stances and footwork in foil fencing?" is the main study question. This research aims to give an empirical examination of this teaching approach's efficacy and determine if it produces quantifiable academic benefits over standard education. This research is very beneficial since it provides new insights into a relatively new approach to teaching fencing, which aids coaches in better understanding how to use cutting-edge instructional strategies in sporting settings. Reckon if proved effective, the differentiated method of teaching can provide to the coaches and trainers an alternative flexible and inclusive training method which can significantly enhance student performance and participation (Reda et al., 2024). This work also contributes to the ongoing debate on the modernisation of physical education and training protocols by analysing and evaluating their effects on motor learning, coordination, and skill acquisition (Ramroop & Singh, 2020). The gaps in current fencing teaching identified in this study contribute to reform through education on a sport that seeks to improve students' sporting skills, address learning disparities in student populations, and provide effective teaching that leads to positive sporting outcomes as seen in a variety of other sports.

This study provides some significant contributions in the field of sports education and fencing training, first of its kind to introduce an alternative instructional method. As one of the most useful and fundamental teaching method, the varied teaching style is the in-depth analysed impact which has been less explored in the context of fencing pedagogy (Paul, 2024). Second comparison of learning outcomes, comparing the results

of a pre-test and a posttest of students taught using traditional and varying teaching methods, this research can provide evidence as to skill acquisition correlation. The take a look at's introduction, which objectives for educational innovation in fencing training, provides the theoretical heritage, research trouble, significance, and look at dreams. The literature review includes earlier research on motor knowledge acquisition, adaptive education, and sports education ([Muhahalhal & Niema, 2023](#)). The study's experimental design, player selection, instructional intervention, information chain, and statistical assessment techniques are all covered in great depth in the procedure section. Comparative statistical analysis is used to explain and comprehend the data in the findings section. The study's key conclusions are outlined in the last section, along with their implications for teaching destiny studies and sports schools, including generational integration and broader applicability in other sports-related fields.

Literature Review

Recent years have seen the publication of several research on modern methods to fencing and education, such as skill development, educational interventions, and the use of technology to speed up information acquisition. This section's content is relevant to the use of generational and opportunity coaching techniques in fencing teaching. ([Kadhim & Malih, 2022](#)) investigated how a kind of learning affected the perceptual-kinesthetic abilities of female foil fencers in a counterattack strategy. Their findings highlighted the need of specific learning models to optimize technical and strategic overall performance and showed the advantages of customized training for motor perceptual accuracy and reaction speed. The idea that various and customized pedagogic aids might help with athletic achievements in fencing is supported by this study.

A different research ([Safwat et al., 2025](#)) examined how augmented reality (AR) technology helped beginning fencing students improve their learning abilities. They found that AR based training improved the spatial awareness, increased the reaction time and decision making process which in turn creates a more engaging learning environment. The research highlights the opportunities for technology-assisted instruction to transcend the limitations of a traditional learning environment and create opportunities for real-time feedback loops that support students' technical performance. ([Magyar & Oraviṭan, 2021](#)) carried out a systematic review to evaluate the effectiveness of different training interventions in the improvement of maximal and mean speed in fencing. Their study brought together the findings from separate studies and highlighted agility, reaction time speed, and footwork accuracy as being pivotal to superior performance. Progressive dynamic training interventions, and competitive with differentiated instruction methods have proven to be essential in fencing to improve the speed and mobility.

Recent literature also covered the topic of fencing footwork assessment. To investigate footwork performance, ([Malawski et al., 2024](#)) devised an automatic skill assessment method based on laptop vision and artificial intelligence fashion. By

removing the need for subjective judgment and providing a record-driven understanding of training effectiveness, their observation showed how epoch-pushed assessment tools enabled goal-total performance analysis To teach fencing footwork, (Malawski, 2023) used immersive segmentation techniques. It also focused on the segmented movement feature to enhance coordination and use data from those types of recordings to create automated, fact-driven training plans that track a fencer's improvement.

Finally, (Zuwayr & Malih, 2024) investigated the results of a 3-dimensional (three-D) development tool in improving the motor talents of female fencers and they found that conscious 3-d development strategies significantly advance reaction time, spatial coordination, and kinesthetic cognition. As a result, the results support the use of complex educational frameworks, such as three-dimensional training methods, in fencing teaching. New theories at the position of cognitive load in mastering are also being explored as enterprise and research move from rote and monolithic strategies to more complex and effective makes use of tailor-made learning.

When taken as an entire, the reviewed studies demonstrate the need of revolutionary and bendy fencing education methods. Important studies topics consist of tailored and focused training packages to enhance motor coordination and perceptual talents (Kadhim & Malih, 2022). Additionally, era-driven education, together with augmented reality and automated overall performance evaluation, improves gaining knowledge of performance and skill improvement (Safwat et al., 2025) (Malawski et al., 2024) (Malawski, 2023). To increase tactical know-how, pace, and agility, schooling methods ought to be numerous and slow (Magyar & Oravit̃an, 2021). Furthermore, three-dimensional schooling methods improve neuroplasticity, expand motor skills and coordination, and result in integrated talent acquisition (Zuwayr & Malih, 2024). This will make sure that the observe displays the various backgrounds and stories of participants while additionally including to the corpus of studies on adaptive teaching and talent improvement. This will allow the research to serve as an empirical study to determine the fate of educational choices and provide a more comprehensive analysis of how teaching strategies affect the study of fencing.

Methodology

Research methodology and field procedures

1. Research Methodology:

The researchers used the experimental method, as it was best suited to the research problem and objective.

2. Research Population and Sample

The research population consisted of third-year students at the College of Physical Education and Sports Sciences, University of Diyala, for the 2022-2023 academic year, totaling 247 students distributed across sections A, B, C, D, and E. The research sample was randomly selected from sections B and C, comprising 40 students, equally

divided into two groups: an experimental group and a control group of 20 students each. Students in the following categories were excluded:

- Participants in pilot studies.
- Students with physical or medical conditions.
- Students practicing fencing.
- Absent students.

The sample length can be defined by the traditional random sample equation (1):

$$n = \frac{N}{1 + (e^2/k^2)} \quad (1)$$

Equation 1 shows the sampling strategy used in this study, which ensures a representative random distribution of people in the pilot and implementation firms. The variables in the equation are important to ensure the statistical validity and reliability of the study's impact.

N (normal population length): This variable represents the full range of viability of individuals. It refers to the full variety of students aged 0.33-12 months enrolled in the College of Sports and Exercise Science at Diyala University. This variable ensures that the sample is representative of all students.

The sample size (**N**) is the exact number of humans selected from the entire population (**N**). In experimental research, deciding on the right model length is crucial to achieve statistical power and ensure that the findings are meaningful and broadly applicable.

Z (known rating or Z-value): In statistical analysis, the Z-gain is the most important value associated with the chosen confidence variable. Z-rankings are generally 1.96 for the 95% confidence phase and 2.58 for 99% confidence level. Reduces statistical estimation error by ensuring that population instability is caused by model size.

P, or proportion of the population that has the desired characteristic: The expected percentage of the population that has the desired characteristic is represented by the p-value in the equation. P represents the estimated percentage of students with baseline fencing ability, as this research focuses on fencing teaching strategies. To maximize the required sample size and detect any changes, researchers often assume $p = 0.5$ in the absence of prior data.

The variable **q** (1), which is the complement of **p**, represents the percentage of the population that lacks the desired feature. The addition of **q** explains the heterogeneity within the research group since $p + q$ must equal 1.

E (Precision Level or Margin of Error): The margin of error (**E**) determines the accuracy of the population parameter estimate based on sample data. A lower E-value

(such as 5% or 0.05) increases the required sample size in order to give more accuracy and reduce the possibility that random errors will impact the findings.

3. Preprocessing

In order to preserve the integrity of the study, strict inclusion and exclusion criteria have been established. Students must be enrolled in the fencing course, have no prior competitive fencing experience, and be in a respectable physical condition in order to take part in hands-on training. Conversely, students who were excluded included those who had previously taken part in the pilot study, had a physical or medical condition that prevented them from completing the trial in its entirety, had previously been exposed to fencing, and had excessive absences from class that might have impacted their performance evaluation (Niță & Magyar, 2023) (Tait, 2023).

A pre-test assessment was conducted to determine the students' initial competency in basic stances and footwork prior to the implementation of the instructional interventions. A performance test rubric created in cooperation with fence industry specialists was used to administer the exam under a performance rating system. Five (Ren et al., 2024) fundamental fencing abilities were assessed in the preliminary evaluation: (1) basic posture (before battle position), (2) position of preparation, (3) advance, (4) retreat, and (5) assault. This criterion was used to evaluate each student's performance, and because all students were evaluated by trained judges using this criterion, there was a consistent baseline from which to measure improvement after the intervention. Equation (2) shows how to evaluate the significance of observed differences between the two groups using a paired t-test.

$$t = \frac{X_1 - X_2}{\sqrt{\frac{S^2}{n}}} \quad (2)$$

a. Models

Each group got one weekly training session throughout the eight-week instructional intervention period. The varied teaching technique, which presents the material in several ways to accommodate for unique learner characteristics, was used to educate the experimental group. Trainees were able to practice at their own pace while still getting peer feedback and guided correction by using task variety, adaptive learning techniques, and self-directed instruction (Aresta et al., 2022).

The varied nature of the teaching method promoted an extra degree of engagement by including problem-solving exercises, peer-led activities, and kinaesthetic techniques to support the memory of skills and understanding of the content. The control group, on the other hand, was trained following the conventional approach, which involves less student-directed learning via preset, ritualized teaching forms, professionalized drill sequences, and teacher demonstrations. Training sessions for the control group were more rigorous and prioritized memory and repetition over adaptive learning. Following the intervention, a post-test was used. Because of this, it was simple to compare the participants' ability levels before and after each quadrant (Aresta et al., 2023). The post-test was designed to assess any improvements in movement execution,

precision, or proficiency. Performance score data was gathered and statistically examined to see if there were any significant differences between the experimental and control groups. The post-test's main objective was to ascertain if the different instructions produced more noticeable improvements in fencing than the traditional fencing instruction provided ([Magnani & Defrasne Ait-Said, 2021](#)). Several strategies were used to maintain the study's rigor and trustworthiness.

For both the pre-test and the post-test, a performance assessment rubric based on fencing coaching standards was used. To minimize subjective bias, the expert judges who assessed student performance were trained professionals with extensive fencing instruction experience. In order to assess their teaching strategies and assessment instruments, a pilot test is also conducted on a different student group. This first research was useful in identifying possible issues with the strategy and provided recommendations for enhancements prior to a large-scale implementation ([Bocharov et al., 2024](#)).

The collected data was assessed using SPSS (Statistical Package for the Social Sciences). The data were interpreted using both descriptive and inferential statistical methods. Summary (descriptive) statistics (mean, standard deviation) were calculated to characterize performance under various conditions. Paired t-exams had been used to evaluate the pre-take a look at and submit-check measures in the organizations so as to compare the volume of person development for the duration of the route of the study ([Pavel et al., 2023](#)). The experimental and manage organizations have been as compared the usage of impartial t-tests to peer if the change teaching strategy significantly affected skill development. Levene's take a look at for homogeneity of variance was also hired to ensure that the groups' talent stages were comparable previous to the intervention and that any variations had been due to the teaching approach instead of variations in innate capacity ([Hamood, 2017](#)).

Ethical issues had been any other critical part of the research system. After being informed of the cause of the study and the info of the protocol at the beginning, each student who participated in it finished a knowledgeable consent shape testifying to their voluntary cooperation. To make sure player confidentiality and anonymity, all overall performance records become recorded using coded IDs in preference to personal facts. Scaffold fence protection methods have been also furnished to lessen the possibility of injuries in the course of education. The staff followed the training in fencing closely to ensure that the match was carried out well. In short, the goal of this thorough, reputable study is to take a look at the potential effects of a variety of coaching strategies in fencing. This method provides an in-depth approach to assessing how relevant educational strategies affect the mastery of talent themes and competencies using experimental methods, quantitative modeling and expert opinions. Therefore, it is expected that the findings in this study can improve fencing pedagogy by providing suggestions and

evidence on how to improve sports education in a training context ([Mahmoud et al., 2022](#)).

b. Procedure

The test was divided into several categories to assess the effect of different teaching techniques on the students' learning of basic foil fencing positions and footwork. Before and after the eight-week test session, mock tests were carried out. This system must be well planned and completed to minimize bias and account for extraneous elements that may affect the final result. Pre-test: Both experimental and management subjects took a pre-test before the study started ([Kriventsova et al., 2021](#)). Focusing on five simple movement techniques – basic stance (on guard), on guard, forward (reinforcing) movement, backward movement (retreat) and lunge technique – this survey attempted to evaluate the scholars' initial proficiency in the art of fencing. Each student's performance turned into evaluated using a set of hooked up analytical standards. Each student's ordinary overall performance was graded by using knowledgeable judges with preceding fencing information based totally on kata accuracy, synchronized execution and fluidity of movement. This allowed for the collection of a baseline data point for all participants to compare the changes in skills over the course of the experiment through a post-test ([Hamood et al., 2024](#)).

The instructional intervention phase started after the administration of the pre-test phase. Teaching style refers to the approach in which teaching was done in this study, where the experimental group implemented and incorporated different learning strategies to cater for the different learning styles of everyone experiencing it. In this method, adaptive learning techniques were used such as, varied tasks, self-paced learning, peer evaluation, and guided corrections so that students can learn at their own learning pace. They also involved the previous group in tasks designed to engage them in problem-solving, kinaesthetic learning strategies, student-led exercises, which offered a more interactive and engaging learning environment. Conversely, the control group was trained with the customary teaching style of instructor demonstrations followed by student repetition of the manoeuvres. The teaching style was constant and uniform, where students practiced in a predetermined order with no adaptive changes. Stresses on the verbal format in terms of explanation, visuals for demonstration, repetition, very limited peer interaction and/or self-exploration-based learning methods ([Lopatenko et al., 2021](#)).

Each organization attended a ninety-minute schooling consultation once per week. With the exception of the educational strategies used for each institution, the education program therefore presented equal get right of entry to the many facets of fencing ([Safwat et al., 2025](#)). By doing this, the researchers had been capable of separate the effect of teaching fashion from other variables that might have an impact at the outcomes, consisting of practice time and instructor help. Following an eight-week intervention, the submit-take a look at became given the usage of the identical criteria because the pre-check. In the publish-check, every student's use of the identical 5 fencing methods from

the pre-take a look at turned into assessed. The outcomes had been evaluated to determine whether the alternative coaching approach outperformed preferred training in accomplishing tremendous talent mastery gains. To make sure consistency of assessment, the identical professionals who evaluated the pre-check conducted the evaluation ([Al-Haddad et al., 2022](#)).

To make sure the validity and reliability of the test, several protection processes have been carried out. A pilot observes turned into carried out with a number of students prior to the main test to refine the evaluation protocols and teaching techniques. Furthermore, the homogeneity of variance (H) test was used to confirm the absence of a statistically significant distinction among the experimental and manage corporations earlier than the start of the teaching manner (up to the pre-test), indicating that those changes in performance have been totally associated with the kind of training supplied. SPSS (Statistical Package for the Social Sciences) became used to statistically compare the pre- and put up-check records. Paired t-checks have been used to compare the pre- and post-check consequences for every institution, and impartial t-tests had been used to become aware of differences between the experimental and control organizations. These findings show the variations in fencing academic settings using numerous coaching styles and provide a basis for boosting sports schooling ([AlHaddad et al., 2023](#)).

4. Experimental Results

The consequences of the research provide a radical assessment of ways correctly various academic techniques resource students in gaining knowledge of basic foil fencing stances and footwork. The pre-take a look at and submit-test effects are as compared using statistical assessments to envision the significance of performance

differences between the experimental organization and the manipulate organization. Figs. 1-4 provide a pictorial representation of the statistical results.

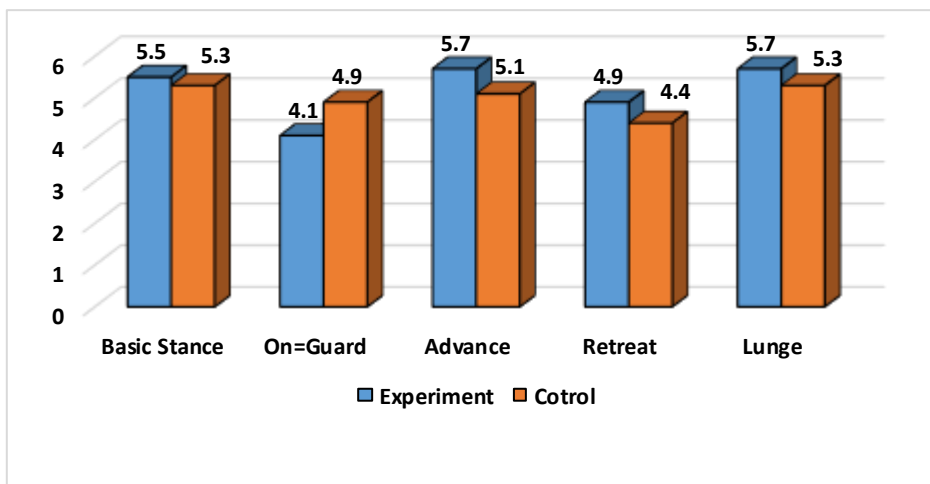


Figure 1. Mean Score Comparison for (Pre-Test)

Pre-test abilities for both occupations in basic stance, on guard, move forward (boost), retreat (backward movement) and lunge technique were found to be similar, as shown in Figure 1. The balanced baseline between the two groups before to the intervention was a significant outcome that demonstrated that any differences between the groups that emerged after the exam were caused by the teaching methods rather than preexisting characteristics. This assertion is supported by the Levine Value for Homogeneity test, which shows that both groups were statistically similar at the start of the study.

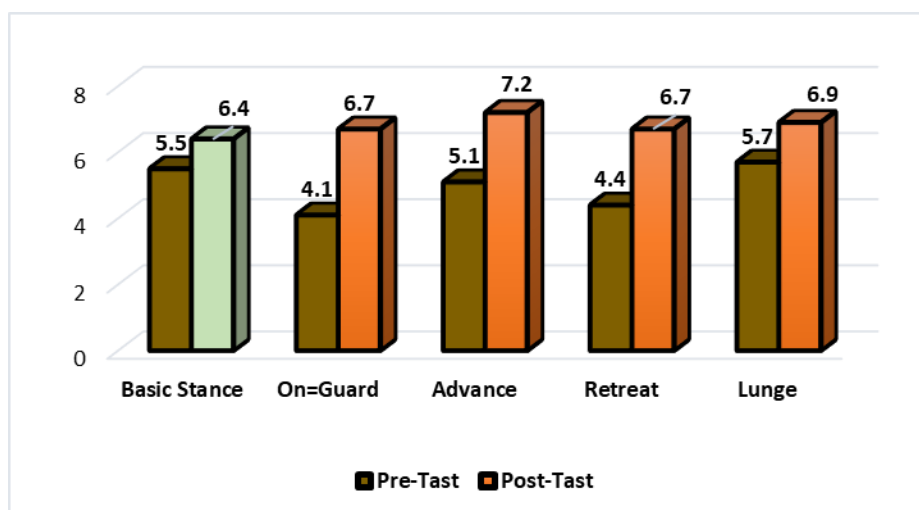


Figure 2. Mean Difference in Movement (Experimental Group)

Figure 2's comparison of the control group's post-test and pre-test results demonstrates the degree of improvement, although it was not as great as that of the experimental

group. The statistical analysis shows that even though traditional method produced progress in some areas, the varied teaching style made the most progress, specifically in skills such as the Lunge Technique which involve coordination, precision, and adaptability.

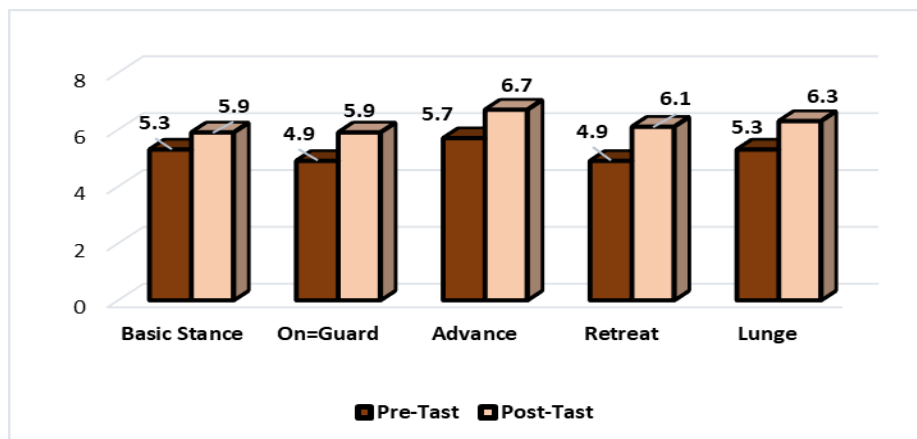


Figure 3. Mean Difference in Movement (Control group)

In figure 3, post-test results of the experimental and control groups are compared, further illustrating the experimental group's dominant performance in all abilities. Statistically significant differences between both groups on post-test scores at the three time points were analysed via ANOVAS, with the largest effect observed for Move Forward (advance), and Lunge Technique. The study confirms that not only does it lead to increased learning in a shorter amount of time, but it also leads to improved performance and retention of a skill. The statistical tests reported in figure 6 further support that observed differences between groups are statistically significantly different, further indicative that variation in instructional method works well within the area of sports education.

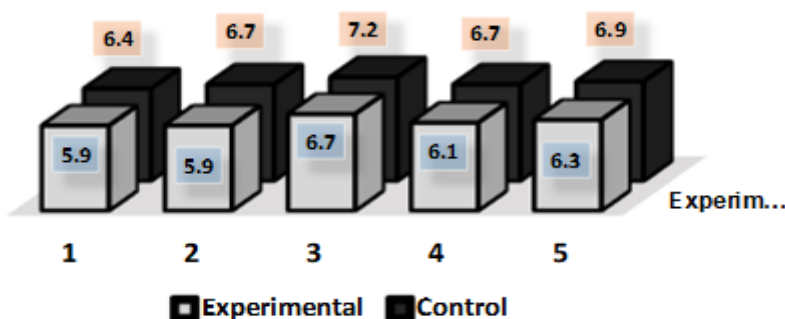


Figure 4. Mean Score Comparison for (Pre-Test)

Figure 4 results revealed that both groups had similar pre-test skill level in executing Basic Stance, On-Guard, Move Forward (advance), (Forward Movement),

Retreat (Backward Movement), and Lunge Technique. This indicated differences in the arithmetic mean in favor of the experimental group, attributed to the use of a contrasting teaching method.

Result and Discussion

The effects showed that scholars' overall performance become drastically stepped forward with the aid of dynamic teaching techniques, especially within the regions of transfer (ahead) and lunge techniques, which require excessive degrees of accuracy, flexibility and coordination. Although traditional teaching methods have a positive effectiveness, they do not keep in mind every scholar's character mastering options. However, with small changes in teaching methods, attendance requirements, allowing college students to assess their own pace, and presenting targeted comments, they led to better retention and faster talent development. These findings, which highlight the benefits of more acquisition of knowledge about the associations of fencing instruction and schooling in other movement skills, will aid the study of schooling of physical activity. For athletes who run the shoes, coaches, and course designers, these impacts have significant ramifications. This research emphasizes the benefits of using various teaching techniques in physical activity programs and argues that pedagogical flexibility is beneficial to learning about effect. The observation's findings demonstrate that the use of interactive, adaptive learning techniques satisfies talent retention, overall performance effectiveness, and student engagement. This idea may be applied to fencing as well as other motor skill-based sports where formulaic techniques might impede a person's advancement. Additionally, by highlighting the need of evidence-based teaching strategies, the research advances the fields of sports technology and pedagogy. To accomplish these objectives, education must undergo several adjustments. Since training strategies are designed to take into account many expertise requirements, it is especially important these days. The results provide a theoretical basis for greater flexibility in training packages and school guidelines for sports activities by providing instructional opportunities for improved athlete improvement and school effectiveness. While this observation provides valuable information, it also opens up new avenues for further research. If looking at is multiplied for larger data sets, the results may be more useful. Future research will likely use a larger sample of people with varying amounts of time, talent level, and conflicting reviews to establish whether versions of the training approaches are relevant to a much broader population. It may also be important to assess retention over a longer period when using specific teaching methods to assess how effectively students retain and develop their skills over the years. Future research would like to look at how fencers are trained using augmented facts, virtual reality, and performance analysis equipment primarily based on AI. This technology also provides choices for integrated competence evaluation based on performance, movement monitoring, and quick feedback, all of which may aid improve instructional flexibility and allow for tailored school transformation. Investigating the connection between conventional teaching methods and AI in higher education may provide effective and

scalable educational solutions. The cognitive and psychological advantages of various types of exercise are examined in another body of related research. Research could look at how these academic flexibilities affect elements like motivation, confidence, and decision-making in a large number of athletic activities in order to better understand how adaptive learning strategies are likely to enhance athletes' normative academic development narratives. Finally, the methodology used in this research might be expanded to look at other sports and talent-based activities in general to see whether these differences in learning tactics improve performance in comparable ways across many sport domains. This broadening of the study horizon will be beneficial for future research that might naturally increase motor competence, instructional strategies, and sports pedagogy. An increase in the mean and a drop in the dispersion (standard deviation) show that performance levels have significantly improved, not only on an individual basis but also at the group level. This pattern strengthens the data's statistical validity and shows how well the chosen teaching strategy develops basic abilities. The study's findings are consistent with those of (Kadhim & Malih, 2022), who clarified that using organized teaching techniques resulted in better performance and fewer student differences, as seen by smaller standard deviations. This theory is further reinforced by the results of, who highlighted that consistent training in footwork and body posture improves mastery of fundamental fencing abilities, as seen by the rise in means after such training. Additionally, (Safwat et al., 2025) emphasized the significance of using contemporary teaching techniques to enhance performance, pointing out that the reduction in mistake rates and the improvement in t-values demonstrate the beneficial effects of methodical instruction. Discussion of the experimental and control groups' results: The study's findings indicated that both the experimental and control groups' skill performance significantly improved after the post-test in comparison to the pre-test. The influence of the sort of educational program employed with each group was highlighted by the differences in the degree and size of this improvement between them. The pre-test and post-test scores for the control group showed significant differences in a number of variables (lunge, forward movement, backward movement, baseline position, and ready posture), with computed t-values being statistically significant at the 0.05 level. As evidenced by the lower standard deviations following the test, this improvement can be attributed to the impact of practice and repetition during the application period in addition to the conventional approach based on explanation, demonstration, and repeated training, which helped to raise the overall performance level and reduce score dispersion. With stronger statistical significance and higher t-values, the experimental group—which underwent the varied method—showed a bigger improvement in the arithmetic means when compared to the control group. The results reflect the effectiveness of a varied approach that takes into account the individual differences among learners, allowing for diverse methods of performing a single skill. This training method provides better opportunities for motor understanding and increases learners' motivation, enabling them to acquire the skill in a way that suits their physical and motor abilities. The superiority of the experimental group—when

compared to the two groups in the post-test—reflects that using a teaching method based on diversification and organizing learning according to learners' characteristics was more effective in developing fencing postures and footwork skills compared to the traditional method. This aligns with what indicated: that diversifying teaching methods contributes to improving the quality of learning, reducing individual differences, and enhancing learner participation in the educational process (Malawski et al., 2024). These results also agree stated regarding the importance of mastering the fundamental motor skills in fencing, as the development of skills in the ready posture and footwork is fundamental to successful offensive and defensive performance (Safwat et al., 2025). This is further supported who emphasizes the necessity of adopting modern scientific methods to achieve correct technical performance in fencing instruction (Zuwayr & Malih, 2024). Thus, it can be said that the improvement observed in both groups indicates the effectiveness of the educational programs in general. However, the greater improvement in the experimental group suggests that the varied approach was more effective in learning basic stances and footwork, thus supporting the research hypothesis regarding the superiority of this approach in developing the skills under study.

Conclusions

This overview emphasizes the importance of redemption training strategies for optimizing expertise development. This evaluation shows that training repackaging using opportunity techniques significantly increases learning effectiveness, providing shoppers with strong incentives not to forget their leisure training activities

Modern teaching frameworks and technological improvements should be used in training programs to improve athletes overall sport performance and understanding.

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