

The Effect of an Educational Program Using Competition Exercises on Skill Performance Level in Fencing Sport

Rehab Mohamed Salama

Department of curriculum and sport teaching, Faculty of Physical Education, Assuit University, Egypt

Abstract: Competition exercises are the basic method for improving skill performance, also it consider the basic method for sport efficiency improvement. They are like these exercises of competition with complication of the surrounding conditions. The purpose of this research was to designed educational program by using competition exercises and its impact on skill performance level in fencing sport, the sample included 30 girls from third year fencing specialty students in Assuit University. Findings indicated the obvious progress in the skillful performance level in the experimental group than control group, the researcher recommends using competition exercises for specialization students as teaching method.

Key words: Competition exercises • Skill performance level • Fencing

INTRODUCTION

Fencing has many features and skills fencer should have to be distinguished by from other sports because it requires a great efforts in specific time with ability to do his best continually at uneven periods for one or two days [1].

Physical education teachers should be aware of more than one teaching method and style and without this knowledge his teaching qualification will decrease and his information and abilities will remain limited at the educational process [2]. Therefore, competition exercises are the main method to improve the skillful performance, they are similar to what practice in competition with complication of the surrounding conditions [3].

Through her teaching of fencing course in the Faculty of Physical Education- Assuit University, the researcher noted the weak skillful performance for girls and their inability to use the skills they taught in the previous years in competition and lectures although they highly master these skills during single practice. From there, the idea of the study is present at designing an educational program using competition exercises where these exercises are consider the basic method to improve skillful sides, they also consider the main method to improve sport efficiency. The research intended to design

the educational program using competition exercises and identify its effect on the level of fencing performance.

Research Hypotheses:

- There are statistical significant differences between the averages rates of pre and post-measures in favor of post-measure for both experimental and control groups in the skill performance level.
- There are statistical significant differences between the averages rates of post measures for the experimental and control groups in favor of experimental one in skill performance level.

MATERIALS AND METHODS

The research used the experimental method for experimental and control group.

Research sample was a randomly sample chosen from third grade girls classes (fencing specialization), Faculty of Physical Education, Assuit university during the academic year 2009-2010. They were 30gils divided into two equivalent group.

Sample homogeneity was in basic variables (age-length-weight) and skeweness coefficients ranging between -0.056 and 0.253. Theses values were between ± 3 , this indicate sample homogeneity.

Regarding equivalence, it was clear that there are no statistical significant differences at the level of significance 0.05 where tabular T value (2.05) at the fundamentals and skill variables (under study), that refers to research sample equivalence.

Data Collection Tools: After reading the related studies and references, the researcher used the following tools:

- Rest meter for length measure (cm).
- Medical scale for weight measure (Kg).
- Expert’s questionnaire form specified for skill tests (Attachment 1).
- Questionnaire form for skill tests (Attachment 2).
- Questionnaire form for competition exercises (Attachment 3).
- Suggested educational program.

Scientific Transactions: Stability and validity were carried out in the period from 3/10/2009 to 10/10/2009 on 10 girls out of the basic sample of study, it was indicated that there is statistical significant correlation relationship at the level of significance 0.05 between first and second application in the whole skill tests (under study) where calculated R value was > tabular R (0.582). Also Alpha coefficient value ranged between 0.921 and 0.983, which indicates the stability and validity of skill tests.

Research Application: The study was applied in two research groups from 11/10/2009 to 24/11/2009 on Sunday and Tuesday for 7 weeks (two lessons a week) and lesson time was 105 min.

Post-Measure: Post- measure for both groups was carried out in 6-7/12/2009.

Statistical Treatments:

- Arithmetic means
- Standard deviation
- Coefficient of skewness
- Correlation coefficient
- T test
- Improvement rate

Attachment 1: Questionnaire Form for Skill Test
Please Put Mark (✓) For the Appropriated Answer

Skills	Test Name	Appropriate	Inappropriate
Marche and rompe	-Speed test marche and rompe for distance 4 m		
	-Speed test marche and rompe for distance 6 m		

Attachment 2: Questionnaire Form for Skill Tests

Speed test marche and rompe for distance 6 m
The goal: Speed measure marche and rompe for distance 6m.
Tools: Stop watch-fencing fleuret-model.
Performance method: The student take the position en garde and when he listen the whistle do marche for many steps before development then do rompe.
Convention: it is not considered arty if the student jump.
Recording: The time is recorded to the nearest 1/10 from second.

Attachment 3: Questionnaire Form for Competition Exercises

Please Put Mark (✓) For the Appropriated Answer

The exercises	Appropriate	Inappropriate
Press		
-Do press then do indirect simple attaque (cope_degagement).		
-Do press then do direct simple attaque (coupdroit).		
-Recode in (six-quarte-septem-octave).		
-From static.		
-From dynamic (marche-development).		

RESULTS AND DISCUSSION

From Table 1, it is clear that there are statistical significance differences between the averages of per-and

Table 1: Differences significance between per and post-measures of skills variables for experimental group N= 15

Skill	Per-measure		Post- measure		Different between averages	T test
	Mean	Std.	Mean	Std.		
1 Speed of Marche and Rompe 6m	9.62	.471	8.87	.362	.75	14.63*
2 Speed and accuracy of Dvelopment	79.51	15.330	141.20	17.250	61.69	28.43
3 Speed and accuracy of Allongement	78.69	14.930	135.70	15.370	57.01	12.25*
4 Speed and accuracy of Allongement	87.64	16.830	164.30	25.110	76.66	12.75*
5 Speed and accuracy of Doublement	72.66	15.370	128.10	17.380	55.44	11.02*
6 Speed and accuracy of Battement	85.68	15.430	141.90	23.520	56.22	11.91*
7 Speed and accuracy of Croise	79.63	15.410	141.80	25.320	62.17	12.37*
8 Speed and accuracy of Parade Sixte and Riposte	83.27	13.550	136.30	24.410	53.03	15.81*
9 Speed and accuracy of Parade Octave and Riposte	75.02	14.520	138.60	24.820	63.58	8.38*

Table 2: Differences significance between per and post-measures of skills variables for control group N=15

Skill	Per-measure		Post- measure		Different between averages	T test
	Mean	Std.	Mean	Std.		
1 Speed of Marche and Rompe 6m	9.64	.493	9.31	.375	.33	9.87*
2 Speed and accuracy of Dveloppement	81.12	13.760	101.45	14.110	20.33	3.38*
3 Speed and accuracy of Allongement	78.01	14.750	98.25	15.480	20.24	2.74*
4 Speed and accuracy of Allongement	87.64	15.850	128.71	22.180	41.06	8.64*
5 Speed and accuracy of Doublement	73.27	13.760	81.36	11.670	8.09	2.52*
6 Speed and accuracy of Battement	85.68	14.840	112.17	21.280	26.49	6.91*
7 Speed and accuracy of Croise	79.13	15.780	108.12	25.630	28.99	5.63*
8 Speed and accuracy of Parade Sixte and Riposte	82.93	13.860	104.70	14.820	21.77	8.73*
9 Speed and accuracy of Parade Octave and Riposte	74.66	16.300	106.90	13.540	32.24	3.11*

Table 3: Differences significance in post-measures for both group (experimental –control) and improvement rate in skill variables N=30

Skill	Experimental Group		Improvement Rate %	Control Group			T test
	Mean	Std.		Mean	Std.	Improvement Rate %	
1 Speed of Marche and Rompe 6m	8.87	.362	7.80	9.31	.375	3.42	5.48*
2 Speed and accuracy of Dveloppement	141.20	17.250	77.59	101.45	14.110	25.06	6.89*
3 Speed and accuracy of Allongement	135.70	15.370	72.45	98.25	15.480	25.95	8.67*
4 Speed and accuracy of Allongement	164.30	25.110	87.47	128.70	22.180	46.85	4.65*
5 Speed and accuracy of Doublement	128.10	17.380	76.30	81.36	11.670	11.04	7.34*
6 Speed and accuracy of Battement	141.90	23.520	56.62	112.17	21.280	30.92	3.94*
7 Speed and accuracy of Croise	141.80	25.320	78.07	108.12	25.630	36.64	3.71*
8 Speed and accuracy of Parade Sixte and Riposte	136.30	24.410	63.68	104.70	14.820	26.25	3.85*
9 Speed and accuracy of Parade Octave and Riposte	138.60	24.820	84.75	106.90	13.540	43.18	6.14*

post-measures for the experimental group in the standard of skill performance in favor of post-measure for all tests where calculated T was (8.38:28.43)> tabular T (2.86) at the level of significance 0.05.

Table 2: indicates that there are statistical significance differences between the averages of per-and post-measures for the control group in the standard of skill performance in favor of post-measure for all tests, where calculated T was (9.87:2.92)> tabular T (2.86) at the level of significance 0.05.

It is clear from Table 3 that there are statistical significance differences between the averages of post-measures for experimental and control group in favor of post-measure of experimental group where calculated T was between(8.67:3.71)> tabular T(2.37) at the level of significance 0.05.

Table 3 indicates an increase in the percentage of variables rates in post-measures than pre-measure in experimental group at all skills variables (7.8%:87.47%) compared to control group (46.85%:3.42%).

DISCUSSION

It is clear from Table 1, concerning skills performance tests for experimental and control groups in per-and post-measures in favor of post-measure where the value of (T) ranged between 8.38 and 28.43 for experimental group.

According to the researcher this indicates that using competition exercises promote the skill performance level, the view that agrees with previous studies [3, 4]. For control group, T ranged between 9.87 and 2.52, this resulted from using instructions style that improves basic fencing skills. Thus the first hypothesis “ There are statistical significant differences between the averages rates of per- and post-measures in favor of post-measure for both experimental and control groups in the skill performance level.” is confirmed.

It is clear from Table 3 that there are statistical significance differences between the averages of post-measures for experimental and control group in favor of post-measure of the experimental group where calculated T was between 8.67 and 3.71. The researcher related this to the effect of competition exercises, this is clear from improvement rates in all skill tests, this agrees with previous studies which stated that skill preparing at the end of preparatory stage is the base of skill performance enrichment and should be conducted through exercises with similar requires as for competition this is by using well gained motor skills efficiently under competition conditions [4-7]. Thus the second hypothesis” there is statistical significance differences between the averages of post-measures for experimental and control group in favor of post-measure of experimental group” is approved.

CONCLUSION

That proposal educational program by using competition exercises affects positively on skill performance improvement in fencing sport.

RECOMMENDATIONS

Involving teaching style by competition exercises as one of learning methods of motor skills in fencing.

REFERENCES

1. Abd Alaziz, I.N., 2001. Fencing technical fundamentals. Book Publishing Center, Cairo, pp: 28. (In Arabic).
2. Singer, K. and M. Dick, 1988. Teaching physical education, system approach., Hawgtan edifying Co, 2nd Ed., Boston, pp: 242.
3. Mahmoud, H.M., 1988. Principles of sport training programs planning. Dar Zahran for Publishing, Cairo, pp: 14. (In Arabic).
4. Alsyed, A., 1994. The effect of competition exercises on three point's zone for first level players in basketball. M.Sc. Thesis, Faculty of Physical Education, Suez Canal University, pp: 97. (In Arabic).
5. Abd Alkalk, A., 1992. Sporting training (theories - applications). Dar Alfekr Alarabi, Cairo, pp: 124. (In Arabic).
6. Abd Allah, A., 1996. The impact of competition exercises using weights on skills performance for juniors under 12 years in basketball. M.Sc. Thesis, Faculty of Physical Education, Suez Canal University, pp: 83. (In Arabic).
7. Bruntti, G. and L. Desont, 1992. The improvement of motor skills in fencing. SDS, rivista, di, culture sportive, Roma, pp: 268.