

## Identifying Obstructs That Affect the Effectiveness of Grade 12<sup>th</sup> Students Performance on the Practical Class of Apparatus Gymnastic Activities in Adet Preparatory School

DagnachewNigerukebede

Research scholar, DebreMarkos University, Ethiopia  
Corresponding Author: DagnachewNigerukebede

---

**Abstract:** The objective of this descriptive survey study aimed at identifying obstructs that affect the effectiveness of Grade 12<sup>th</sup> Students performance on the practical class of Apparatus Gymnastic activities in Adet preparatory school. Henceforward, the subjects of the study include Grade 12 students, Physical education teachers, the school principals, parent-teacher union member, YilmanaDensaworeda sport office experts, and the school psychologist. From 419 targets population of Adet preparatory school Grade 12<sup>th</sup> students, 180 students were randomly selected from five classes (4 natural and 1 social sciences). There were 10 physical education teachers in Adet preparatory school. Hence, all of them were selected as subjects and also 6 physical education teachers in Adet town junior schools, 2 yilmanadensaworeda sport office experts, 3 parent-teacher union members, 2 school principals and 1 school psychologist were taken purposively. In the process, direct participant observation, semi-structured interview, and questionnaire were employed as a major data collection tools used to identify the hampers of the issue. The questionnaire's was piloted for reliability and validity. The data collected were analyzed and interpreted using percentage statistical technique. The findings revealed that the problems stem from the students, Physical education teachers, the school principals, and students family. The result of this study indicated that lack of the competency levels of teachers implementing the gymnastics and students, the inadequacy of Gymnastic equipment's and facilities, Insufficient period allotment and period allocation in day time and large class size, the students family were not invite students to engage gymnastic activities during lower grade levels were some of obstructs that affect the effectiveness of Grade 12<sup>th</sup> Students performance on the practical class of Apparatus Gymnastic activities in Adet preparatory school. Based on the findings of the study, recommendations were suggested for the effective strategy of student's performance for apparatus gymnastic classes in Adet preparatory school and for indicating what has to be done focusing on the effectiveness of students in Apparatus gymnastic activities in the school by conducting further research.

**Keywords:** Apparatus; gymnastics; effectiveness; performance; student; school

---

Date of Submission: 16-12-2018

Date of acceptance: 31-12-2018

---

### I. Introduction

Gymnastics is often considered to be a sport for the young, but people of all ages and abilities can participate. There has recently been a tremendous growth in the area of pre-school groups where to 1 to 5 year olds discover the foundations of human movement in a playful environment. The children participate with their parents under the tuition of a trained leader. Participation can be at a recreational level simply for fitness and enjoyment and classes for adult beginners and retired competitors are growing in popularity. In the UK it is possible to participate in a variety of gymnastic activities including Men's and Women's Apparatus Gymnastics, Sports Acrobatics, Rhythmic Gymnastics and Recreational Gymnastics. Recreational gymnastics encompasses pre-school gymnastics, school gymnastics and gymnastics for adult or veteran gymnasts. People with disabilities may also participate in both recreational and competitive gymnastics.. (<http://www.teachpe.com/gcse/Gymnastics.pdf>).

In Germany, Basedaw (1723-90) and Goths Muth (1759-1839), both started schools in which physical education formed an essential part of the curriculum. Goth Muth's book gymnastics for the young, become popular in many countries and able his teaching to travel far. Gusts Muths (1759-1839) known as the "Grandfather of gymnastics" for his outstanding contribution to the activity's growth, produced the first written work on modern gymnastics in 1793 "gymnastics for youth" his program describes progressions on the sloping beam, climbing poles, hope ladders, and climbing ropes, various balance exercises and exercises on the swinging beam. The exercise designed primarily for the individuals as related to natural environment gave to the student the satisfaction of personal accomplishment trough both self-testing group activities.

Gymnastic is one type of physical activities that is not an easy sport and it will not be mastered quickly. It will take high process to develop skill, strength and potential in a way like others few sports cons but the

effectiveness and success on new movements in mastering overcome like other sports can offer. Gymnastic can be classified in to apparatus and non-apparatus gymnastics. In the Ethiopian high school and preparatory physical education context, non-apparatus gymnastics is given for high school students, whereas apparatus gymnastics is given for preparatory schools.

Effectiveness of apparatus gymnastic activity is a process in which students are achieving there setting goals of practical apparatus gymnastic activities based on their performance at the end of the semester.

In gymnastics, we are mostly concerned with technical factors, in that all disciplines come with exceedingly rigorous technical requirements for elements demanding extreme precision; with mental factors, in that these exercises come with a high risk factor; the quality of gymnastics equipment is also essential to accident prevention: quality of apparatus, landing mats, floors. Technical requirements provided in the rules and code of points (a veritable bible which lists the value of each exercise) may play an important part in the onset of specific chronic pathologies or accidents (Dr. Michel Leglise and Dr. Michel Binder (<http://www.fig-gymnastics.com/>)).

There are different kinds of apparatus gymnastic activities, but Adet preparatory school students are learning Horizontal bars, parallel bars and vaulting horse both theoretical and practical classes. When we see the effectiveness of student's performance on practical class of apparatus gymnastic activities given by the physical education teacher, majority of Grade 12<sup>th</sup> students were not successful too.

Qualified and dynamic leadership is essential to the implementation of an effective and comprehensive program of physical education in the secondary school (Bucher and Kong, 1974).

Training loads in gymnastics are typically quantified by assessing weekly hours of gymnastics specific training (Burt, Naughton, Higham, &Landeo, 2010).

There were 16 grade 12<sup>th</sup> rooms in Adet preparatory school, among those rooms 8 of them were the research site from 12<sup>th</sup> G-12<sup>th</sup> N. Even if these rooms were performed apparatus gymnastic activities in the 1<sup>st</sup> semester practical sessions, majority of grade 12<sup>th</sup> students seems a difficult job to do apparatus gymnastic activities effectively. This was highly influenced for majority of students were not scoring good result concerning the performance of apparatus gymnastics, lack of interest for the subject physical education, it creates lack of confidence to do so. Therefore, this study aims to assess the effectiveness of students on the practical class of apparatus gymnastic activities together with the value of its proper execution on scientific basis. It also expected to provide valuable support for improving the effectiveness of performing the activity.

The main aim of conducting this research was identifying hampers that affect the effectiveness of Grade 12<sup>th</sup> students' performance on the practical class of apparatus gymnastic activities in Adet preparatory school.

## **II. Statement Of The Problem**

Apparatus gymnastic course in the preparatory school level were facing different obstructs for the effective performance of students. In that, class size, the competency level of the coach, the interest of students, equipment's, engagement of lower grade levels, and time allotment of the subject. As I have seen it the last 9 years ago as a physical education teacher, grade 12 students in Adet preparatory school were not effective regarding the implementation of performing apparatus gymnastics, because of this majority of students were not score a good result about apparatus gymnastic course. So that, the rationale of this research study is identifying the major hampers that affect the effectiveness of Grade 12<sup>th</sup> students' performance for apparatus gymnastics in Adet preparatory school and to indicate possible solutions.

### **HYPOTHESES**

There were many obstructs that affect the effectiveness of Grade 12<sup>th</sup> students' performance on the practical class of apparatus gymnastic activities in Adet preparatory school. But the researcher hypothesized the majority of obstructs enclosed by the following three basic points:-

- ❖ Shortage of gymnastic equipment and facilities has the main obstructs of the effectiveness of students performance on apparatus gymnastic activities
- ❖ Insufficient period allotment and period allocation in day time and large class size has also major obstructs of the effective performance of apparatus gymnastics.
- ❖ The competency levels of teachers implementing the gymnastics and students lower grade level engagement of gymnastic activities has the major obstructs of the effective performance of apparatus gymnastics in Adet preparatory school.

### **SIGNIFICANCE OF THE STUDY**

The gymnastic sport program in these schools should be enjoyable and provide opportunities for students to develop a positive association with physical activity. Through the activity, students are given the opportunity to participate in a variety of physical activities and acquire the concepts and skills that will enable

them to participate in these sports both for leisure and to score good result. In addition, apparatus gymnastic provides a natural platform and valuable opportunities to develop self-management skills, social and cooperative skills, and build character. It serves to complement other educational areas in promoting the desired outcomes of education. In particular, gymnastic helps to cultivate healthy habits, teamwork, resilience and resolve. Besides, the effective performance of students in Apparatus gymnastic will be having high importance to score an excellent result in their own grade levels for Physical education subject. It may offer considerable contribution to in rich the relevant approach to those who are responsible teacher and students to the subject and important situation of effectiveness of apparatus gymnastic within the school and even outside the school they may get a chance to be competent in gymnastically activities.

### **SCOPE OF THE STUDY**

Although the effectiveness of students on the practical class of apparatus gymnastic activities are suffering at different preparatory schools in the Amhara region in, to make the study specific and manageable, it was conducted the 5 Natural and 1 social classes/rooms of Adet preparatory school, Grade 12<sup>th</sup> G-12<sup>th</sup> K and 12<sup>th</sup> M students.

### **III. Objective Of The Study**

#### **General Objective of the Study**

The universal objective of this study was intended at to identify major obstructs of Adet preparatory school Grade 12<sup>th</sup> students in the effectiveness of apparatus gymnastics practical activities

#### **Specific Objectives of the Study**

The specific objectives of this study were to:

1. To assess the current result of Apparatus gymnastic course of Grade 12 students in Adet preparatory school
2. To identify obstructs, determinants and problems of Adet preparatory school grade 12<sup>th</sup> students on executing the practical class of Apparatus gymnastic activities.
3. To provide new idea that will contribute greater success for the students are currently facing in the effectiveness of students to perform apparatus gymnastic activities.
4. To draw lesson indicators that will give input for future improvements and solve problems.

### **RESEARCH DESIGN**

The study was discovered the major obstructs that affect the effectiveness of Grade 12<sup>th</sup> students' performance in Apparatus Gymnastic practical activities in Adet preparatory school. Therefore, in order to address the intended purpose, the researcher used a descriptive survey method in research design for the appropriateness of the aptness of data.

### **SOURCES OF DATA**

The researcher used both primary and secondary data. Students, physical education teachers, home room teachers, parent-teacher union members, and school principals were used as primary source of data. Secondary data were collected from recent publications and other related documents.

### **SAMPLING AND SAMPLING TECHNIQUES**

The researcher adapted simple random and purposive sampling techniques. The students and parent-teacher union members were selected random sampling technique. Whereas, the physical education teachers, home room teachers and school principals were selected purposive sampling methods in order to get a range of experiences related to major obstructs affecting the effectiveness of Grade 12<sup>th</sup> students' performance in Apparatus Gymnastic practical activities in Adet preparatory school.

### **DATA GATHERING INSTRUMENTS**

#### **Observation**

The researcher was used one of the data gathering tool of the direct participating observation that was made to have seen the competence level of Physical education teachers, the interest of students to engage the practice, the class size, time allotment for the practical session, equipment's and facilities, During the observation time, the researcher used structured check list to collect data.

#### **Questionnaire**

To acquire the necessary information from students and physical education teachers about the effectiveness of Grade 12<sup>th</sup> students' performance in Apparatus Gymnastic practical activities in Adet preparatory school a questionnaires was arranged. Open and closed ended form. In addition to this, to make

privacy, the respondents were not asked to set their names on the questionnaire. As a replacement for, they were gently requested to indicate the performance of students), age, current educational status and Sex.

**Interview**

The interview was conducted to school principals, home room teachers, parent-teacher union members due to their direct relation of students. Ahead of starting the interview, the interviewees were well informed about the function of the study. Furthermore, for the purpose of ethical consideration, they were informed that no offended would be come to them because of their participation in the study. On top of this, they were informed that they would remain nameless in the presentation and discussions of the results of the study.

**METHOD OF DATA ANALYSIS**

The evidence gathered through questionnaire were ordered, structured and framed to suit analysis and conclusion. When interpreting the data was analyzed one of statically acceptable tools (percentages) and descriptive statements method was use to questions that require quantitative dimension. Information generated from the interviews, and direct participant observation, open ended items in the questionnaires were analyzed and presented qualitatively.

**IV. Finding**

**Background Characteristics of the Study Groups**

Based lying on the responses gathered from participants 110 (61%) were males and 70 (39%) females. The educational status of the respondents show that all 180 (100%) were attended in grade 12 students. Whereas, the majority 9 (90%) of physical education teachers were degree holders and the remaining 1(10%) of them was the only Master of degree holder. Concerning to the respondents age almost 160 (88.88%) of student and 8(80%) of physical education respondents their ages lies in between 16-20 and 31-35 years old respectively that were youngsters. More over 70% of the respondents indicates that they have no good experience in Apparatus gymnastics sport.

**INTERPRETATION OF DATA**

Under this portion the data that were collected through the different data gathering instruments were imminent and interpreted.

**Table1. The interest of apparatus gymnastic activities:**

Responses	Frequency of response in percentage (%) (N= )			
	students		Physical education teachers	
	No	%	No	%
Very high	6	3.33	-	-
High	19	10.55	1	10
Medium	26	14.14	2	20
Low	46	25.55	1	10
Very low	83	46.11	6	60
Total	180	100	10	100

The above table 1 exhibits that the majority 46.11 % and 66 % respondents of students and Physical education teachers respectively were replied that they have not that much interest to perform apparatus gymnastic activities in practical sessions. Based on this response, we can suggest that lack of interest may affect the effective performance of students in apparatus gymnastics in Adet preparatory school.

**Table2. Regarding weekly period of the subject physical education and class size**

Item	Frequency of response in percentage (%) (N= )					
	Students			Physical education teachers		
	Yes	No	Total	Yes	No	Total
Does Weekly one period for apparatus gymnastic practical session is sufficient in relation to the class size of the school?	36(20%)	144(80%)	180(100%)	2(20%)	8(80%)	10(100%)

As shown in the above table 2, the majority, 80% of student and physical education teacher respondents were replied that one period per week session for executing apparatus gymnastic activities in relation to the large size of the school was insufficient too. This indicate that the time allotment and class size of the school were not be related and this may be a great obstruct for the effective performance of Apparatus gymnastic practical activities for Grade 12<sup>th</sup> students in Adet preparatory school.

**Table3. Gymnastic equipment's and facilities in the school**

Item	Frequency of response in percentage (%) (N= ___)					
	Students			Physical education teachers		
	Yes	No	Total	Yes	No	Total
Is there adequate gymnastic equipment's and facilities in the school?	19(10.55%)	161(89.44%)	180(100%)	1(10%)	9(90%)	10(100%)

Results about equipment's and facilities of gymnastic, the majority 89.44% of student's respondents and 90% of physical education respondents were responded that the gymnastic equipment's and facilities were not adequate. Based on the responses of teachers as similar to students, there was a shortage of equipment's and facilities to execute apparatus gymnastic for grade 12<sup>th</sup> students in Adet preparatory school. In general, on the basis of the above explanation it may be correct to conclude that practical gymnastic training was nothing without the fulfilment of equipment's and facilities, this may lead to say that students were not be equipped with adequate performance that can enable them to succeed their own goals about apparatus gymnastic activities.

**Table 4; Teachers competency**

Responses	Frequency of response in percentage (%) (N= ___)					
	students			Physical education teachers		
	Yes	No	Total	Yes	No	Total
Do you believe that the competency level of physical education teacher to teach the apparatus gymnastic activity is good?	64 (35.55%)	116(64.44%)	180 (100%)	4(40%)	6(60%)	10(100%)

The above table 4 exhibits that, 64.44% of the respondents of students and 60% of teachers were replied that physical education teachers that delegated to teach apparatus gymnastic activities in Grade 12<sup>th</sup> were not have good competency level to teach apparatus gymnastic activities practically. This indicated that the incompetency level of physical education teacher in Adet preparatory school may have a great obstruction for the effective performance of grade 12<sup>th</sup> students in this school.

**Table 5: Student's engagement from lower grade levels**

Responses	Frequency of response in percentage (%) (N= ___)					
	students			Physical education teachers		
	No	N%	total	No	%	total
Do you think that like grade 12 <sup>th</sup> practical apparatus gymnastics activity that has been thought in lower grade levels?	16(8.88%)	164(91.11%)	180(100%)	-	10(100%)	10(100%)

The response given by the respondents in the above table 5, the majority 91.11% of students and all of physical education teacher respondents replied that many students were not engaged apparatus gymnastic activities in the lower grade levels. This indicated that students were not a chance to engage in the lower grade levels had a great impact for the current grade level effective performance of apparatus gymnastic activities.

### V. Conclusion

According to this research Apparatus gymnastic is the basic and one of the physical education part Apparatus gymnastic is one of interesting activities and can make student strong, agile, healthy, fit and support to develop self-confidence, self-esteem, and cooperation, because of the heaviness and the lower level competency of physical education teacher, many students have not been interest to learn and perform those interesting activities. But according to the finding artistic gymnastic is not implemented properly in Adet preparatory school in case of many factors. From those factors some of them are: - shortage of equipment's and facilities, lack of lower grade level engagement, large class size, weekly one period is insufficient time allotment for the subject, absence of 1<sup>st</sup> aid kit and 1<sup>st</sup> aid giver inside the school, and the competency level of physical education teacher implementing the apparatus gymnastic practical activities were not good. This indicated that the mentioned problems were the major obstruction of the effective performance of Apparatus gymnastic practical activities for Grade 12<sup>th</sup> students in Adet preparatory school.

## **VI. Recommendations**

The researcher recommended the following recommendations based on the finding of the study.

- ❖ The physical education curriculum designer should revised and design the subject by keeping subject continuity and vertically relationship between each grade levels in collaboration with other physical education teachers and gymnastics federation.
- ❖ The government should give emphasis on minimizing the number of students in each class.
- ❖ The regional education bureau should prepare and produce modified equipment's and distribute among the schools which is used for Apparatus gymnastic. And also physical education teachers should prepare some modified gymnastic equipment's like parallel bar, horizontal bar from wood and mattress from grass.
- ❖ The ministry of education and curriculum designers should allocate adequate time for physical education subject
- ❖ Amhara region education bureau should work with federations and giving different work shop, short term and long term training for physical education teachers to raise their level of competency.
- ❖ Further studies should be conducted in this area with more schools coverage throughout the Region.
- ❖ Physical education teachers should make themselves update the current teaching science or should attain teaching accreditation and update regularly and to show willingness, dedication and commitment to the job as these are some of the characteristics of a given profession.
- ❖ Hence, school is one of the main sources of youth sports men and women, so the concerned bodies should work in collaboration with schools so as to produce youth. Moreover, it should organize regular inter-school competition to give chance for young talented gymnasts.

## **References**

- [1]. Burt, L., Naughton, G., Higham, D., & Landeo, R. (2010). Quantifying training load in pre-adolescent artistic gymnastics. *Science of Gymnastics Journal*, (3), 5-14.
- [2]. Bruce Frederick (1975): *Teaching Gymnastic Skill to Men and Women* London
- [3]. C.eric Pearson (1958): *a Class Room Teaching Guide to Physical Education*. New York
- [4]. Charles a Bucher (Consistent R. King (1974): *Method and Materials for Secondary School Physical Education*. Fourth Edition. Saint Louis
- [5]. Charles A. Bucher (1975): *Foundation of Physical Education*. (7th ed.) by the C.V. Mosby Company USA
- [6]. G.Doren Pallet (1965): *Modern Education Gymnastics*. New York
- [7]. J.M dent and Sons ltd (1969): *A Movement Approach to Educational Gymnastic*.
- [8]. Pauline Prestidge (1947): *Women's Gymnastics for Performer and Coach*; Pauline And Jim Prestidge
- [9]. Peter H. Werner, PED: (1994): *Teaching Children Gymnastics Becoming a Master Teacher*. University of South Carolina, Columbia
- [10]. Phyllis Cooper (1982): *Teachers Gymnastic Skills to Men and Women*. India.
- [11]. Ruth Morison (1969): *Movement Approach to Education Gymnastics* London J.M Dentand Jons Ltd.

Dagnachew Nigrukebede. " Identifying Obstructs That Affect the Effectiveness of Grade 12th Students Performance on the Practical Class of Apparatus Gymnastic Activities in Adet Preparatory School." *IOSR Journal of Sports and Physical Education (IOSR-JSPE)* 5.6 (2018): 23-28.