# MODIFICATION OF STRAW MEDIA IN BOARDING SCHOOL BASED FLOOR GYMNASTICS LEARNING

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(Submission Track: Received: 02-02-2025, Final Revision: 03-03-2025, Available Online: 28-03-2025)

**Abstract.** Teaching and learning activities in schools will run smoothly and effectively if they have complete and supportive facilities and infrastructure. This study uses survey and observation methods at SMK Islam Bustanul Athfal. Ulum Pakusari, the lack of infrastructure, especially mat media, makes learning less effective and efficient. Many students wait for their turn when doing floor gymnastics. In this study, a modification was carried out to create a simple alternative modification of rice straw as a supporting tool for floor gymnastics learning. Modified rice straw measuring 60x120 cm, 30 cm thick, requires a stable balance in its manufacture with straw media as a solution for floor gymnastics learning. The method used is to define, interpret, and explain a situation. The learning process using straw media modifications is very helpful in overcoming the lack of facilities at SMK Islam Bustanul Ulum. Straw is easy to use and as a supporting tool for learning. The main advantages of this media are low cost, availability of materials, and effectiveness in increasing student comfort and safety when doing gymnastics movements.

Keywords: modification; straw media; floor gymnastics; facilities and infrastructure; learning



#### **INTRODUCTION**

Physical education learning is usually identical to the process of learning movement skills using real sports equipment. But in the current era there is very rapid development, especially in technological developments, so teachers must be able to prepare appropriate lessons (Ardiana 2024).Actually, physical education is an activity that aims to improve students' physical and spiritual well-being in an effort to organize a good lifestyle (Sudrajat, Subandi, and Setiakarnawijaya 2024). The use of standardized sports equipment is often an obstacle in the implementation of effective and efficient physical education learning, this is because not all schools have adequate equipment and supplies (Budi 2021). Modification can generally be understood as an effort to make changes or adjustments. However, in specific research, modification is an effort aimed at creating and presenting something fresh, original, and interesting, while maintaining the basic elements of the modified thing (Budi 2021).

The purpose of the modification process can also increase the chances of student success in participating in learning, so that physical education teachers will find it easier to deliver the material (Sobarna 2018). The implementation of adjustments is very important for every physical education teacher, as one of the options or solutions to overcome the challenges that arise in the physical education learning process.

In the floor gymnastics branch of sports, physical education teachers can modify straw media as a substitute for mats for landing. Media is a means that functions as a link for information for the learning process (Cahyaningtias 2021). Media is said to be unique if it is able to arouse and increase students' enthusiasm for learning.

Learning media is a tool that can help teachers convey learning material with the aim of increasing children's interest (Wulandari et al. 2023) and interest in the learning material presented (Moto 2019). Thus, media can be a stimulus for students to learn more actively and enthusiastically, and attract their interest in the learning delivered by the teacher. Straw is a by-product of farming activities consisting of the remains of stems and stalks of wheat plants that have dried, after the seeds are separated (Sulistyaningsih 2019). This straw media modification is done by putting straw into a burlap sack until full and then sewing it, the media can be used as a substitute for a mat in the floor gymnastics branch of sports.

Floor gymnastics is generally known as an exercise on a flat surface, but some also call it a somersault. This type of gymnastics is often referred to as an exercise without equipment because when doing the movements, the gymnast does not use special equipment (Topo 2017). The floor gymnastics movements themselves that are taught at SMK Islam Bustanul Ulum Pakusari include forward rolls, backward rolls, candle positions, and tiger jumps. SMK Islam Bustanul Ulum Pakusari is a pesantren-based school. Pesantren-based schools or pondok are Islamic education that combines two social systems, namely pesantren and schools. Both the pondok and school education systems have their own characters and social advantages. The goal of SBP is to produce people who are faithful and pious and are able to master science and technology as a whole, so that they can contribute to society (Saepudin 2019).

In sportswear for female students of SMK Islam Bustanul Ulum Pakusari, they are required to wear long skirts and training pants, while male students generally still wear sportswear. This media modification aims to overcome the limitations of facilities and infrastructure in schools, and also to teach them to be able to utilize items around us to solve a problem.

#### METHOD

Action research is a unique form of research design. In action research, researchers not only define, interpret, and explain a situation, but also make changes or interventions simultaneously. The goal of this approach is to achieve improvement or increase participation (Yono 2020). Action research is a process involving cycles of action, based on reflection, response, evidence, and evaluation of previous actions and current situations. The purpose of action research is to contribute to the solution of practical problems in urgent situations, and to achieve the goals of social science through ethical and mutually beneficial collaboration.

The subject of research is the object being studied, which can be an individual, an object, or an institution (organization). Basically, the subject of research is an entity that will be analyzed and become the basis for concluding the research results. Within the subject of research, there are more specific research objects to be studied (Surokim 2016)In this study, the subject of research is straw modified into a mat as a learning aid for floor gymnastics.

The procedure for performing straw modification includes preparation, application, and evaluation.

#### 1. Preparation

Prepare all the materials that will be used to make straw modifications, including straw, burlap sacks. There are also additional equipment such as burlap needles, raffia rope, scissors, plastic bags.

#### 2. Implementation

This straw modification media is made of burlap sacks, plastic bags, and sewn using burlap needles and raffia rope. This modification has two parts, namely the inside and the outside. The inside is filled with straw that has been arranged and wrapped in a plastic bag that functions as a stabilizer of movement and prevents straw from scattering inside the burlap sack. The outside is sewn using burlap sacks and raffia rope to make it look neat and elegant when used, and the burlap sack as a softener for the outside to be effective when used. The method for making straw modification learning media is as follows:

- a. First, prepare the materials that will be used to make the straw media modification.
- b. Then take a plastic bag and cut both sides and the bottom of the plastic bag.
- c. Spread out the cut plastic bag, then arrange the straws neatly on top of the bag.
- d. Tie the plastic bag containing the straw with raffia rope.
- e. don't tie it too tight
- f. Put it in a burlap sack neatly and carefully
- g. The holes in the burlap sack are closed using plastic bags from the inside.
- h. Sew the hole in the burlap sack with a needle and burlap thread using raffia rope and
- i. The straw media modification is complete and ready to use with lightweight materials and does not require a lot of cost.

### 3. Evaluation

Learning media includes everything that can be used to stimulate students' feelings, thoughts, and abilities (Ekayani 2021)Learning media is very important and cannot be avoided in efforts to achieve the success of student education programs (Daniyati 2023)Media is very important and needed by an educator to convey

material as a support for learning materials, therefore a replacement mattress is needed for the continuity of learning if there are obstacles to school facilities and infrastructure. With this modification, it is hoped that it can attract students' learning motivation in the future, and can also increase students' insight to always think creatively.

Criteria	Mattress	Straw
Size	Size 100x200cm	Size 60x120cm
Thick	20 cm	30 cm
Balance	Stable	Stable

 Table 1. Comparison of Dimensions of Straw and Modified Mattress

This straw media modification can make it easier for sports teachers to deliver material using straw media to students. With this learning media, it can make it easier for students to achieve the actual goals of sports education.

Table 2. Comparison of Straw and Mattless Modifications			
Media	Lack	Excess	
Mattress	-Heavy -The price is expensive	-Gentle	
Straw modification	-The shape is less attractive	s -Light -The price is cheap, easy to	

Table 2. Comparison of Straw and Mattress Modifications

The right solution to overcome the problem of the lack of floor gymnastics learning media is to make modifications using straw media. Modifying straw media does not require expensive costs and the materials needed are easy to obtain, straw media modifications can be carried anywhere because the material is light. With this straw media modification, learning can run normally and there are no obstacles to facilities and infrastructure at school.

get

-Comfortable -Gentle

-Effective learning media

# **RESULTS AND DISCUSSION**

This study aims to evaluate the effectiveness of straw modification as a learning medium for floor gymnastics at SMK Islam Bustanul Ulum Pakusari. Based on the results

of observations and trials, it was found that straw modification media has a number of advantages compared to conventional mattresses. The trial was conducted on students who took part in floor gymnastics learning using modified straw media. Straw material is a safe and easily found material around the school where the school is located near rice fields, many farmers plant rice alternately harvesting so that raw materials are abundant without buying voluntarily given by farmers around the school, something that is easy to modify is used as a breakthrough in physical education learning by modifying straw into an efficient and effective learning tool used in a learning. The success rate in performing floor gymnastics movements also increased, with the percentage of success reaching 85% of the total students who took part in the trial. In addition, this media modification also received a positive response from sports teachers, who stated that this media was more economical, easy to make, and effective as an alternative to gymnastics mats.

In addition to direct observation, interviews were also conducted with students and teachers to determine the effectiveness and obstacles faced in using this media. Most students felt that straw media provided more comfort than conventional mattresses, especially in terms of softness and shock absorption. Teachers also mentioned that the low production costs made it a viable alternative for long-term use. Effectiveness of Straw Modification as a Learning Media for Floor Gymnastics The main finding of this study is that straw modification learning media can be an effective alternative in supporting floor gymnastics learning. Straw modification provides sufficient cushioning to protect students when performing gymnastics movements, especially for beginners who are just learning basic techniques such as forward and backward rolls.

Although in general straw modification showed high effectiveness, there were some variations in results observed during the study:

Some students felt uncomfortable with the texture of the burlap sack used as the outer wrapper. This shows that there is an opportunity for further development in the design of this media, for example by adding a softer outer layer. The stability of straw as a base also varies depending on the density and filling method in the burlap sack. Further testing can be done to find the best method of packing straw to keep it stable when used.

The results of this study emphasize the importance of media modification in physical education to improve the effectiveness of learning. regarding the use of natural

materials as learning aids also supports the finding that simple materials such as straw can be used effectively in physical education.

Compared to the use of conventional mattresses, straw modification has advantages in terms of price and availability, but there are still aspects that can be improved, especially in design to make it more comfortable for students. This can be the basis for further research to explore more optimal material combinations.

# CONCLUSION

Teaching and learning activities in schools will run smoothly and effectively if they have complete and supportive facilities and infrastructure. At SMK Islam Bustanul Ulum Pakusari there is still a lack of floor gymnastics learning media in the form of mats. So the right solution is to create a straw modification media as a learning tool to overcome the lack of existing facilities and infrastructure. In addition to supporting floor gymnastics learning facilities, modified media can also be used to attract students' interest so that they have an increased sense of enthusiasm in learning.

Straw modification can be an effective and innovative solution in supporting floor gymnastics learning in schools. The main advantages of this media are low cost, availability of materials, and effectiveness in increasing student comfort and safety when doing gymnastics movements. With some further improvements, this media can be a sustainable alternative for schools that face constraints on facilities and infrastructure.

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