

# Development of Basic Smuggling Technique Training Model for Wrestling Students at SMAN 6 Bandar Lampung

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## Abstrak

*This study aims to analyze the need for the development of a basic technique training model for wrestling extracurricular students at SMAN 6 Bandar Lampung. This study uses a quantitative descriptive method with a needs analysis approach, involving 19 students as research subjects. Data collection was carried out through observation, interviews, and questionnaires based on the Likert scale. The results of the analysis showed that all aspects of the technique were in the category of need for development, with an average score of 3.8 each, namely: initial position understanding 3.8, 3.5 step swing, hand and foot coordination 3.2, balance and body control 3.6, and final execution of the technique 3.4. The lowest score was found in the aspect of hand and foot coordination (3,2), indicating that this aspect is a top priority to be developed. Thus, it is necessary to develop a systematic, gradual, and tailored training model to students to increase the effectiveness of mastering basic techniques in wrestling in school wrestling.*

**Kata kunci:** Gulat Dasar, Latihan Teknik Koordinasi Tangan dan Kaki, keseimbangan dan Pengendalian Tubuh, Efektivitas Penguasaan Keterampilan

## Abstract

This study aims to examine the need for developing a basic technique training model for wrestling extracurricular students at SMAN 6 Bandar Lampung. The research employs a quantitative descriptive method using a needs analysis approach, involving 19 students as participants. Data were collected through observation, interviews, and Likert-scale questionnaires. The analysis results indicate that all technical aspects fall into the category of needing development, with an average score of 3.8 for each aspect: understanding of the initial position 3.8, step swing 3.5, hand and foot coordination 3.2, balance and body control 3.6, and final execution of techniques 3.4. The lowest score was found in hand and foot coordination (3.2), highlighting it as the top priority for improvement. Therefore, it is necessary to develop a systematic, gradual, and tailored training model to enhance students' mastery of basic wrestling techniques in the school setting.

**Keywords:** Basic Smuggling, Technique Training, Hand and foot coordination, Balance and body control, Effectiveness of skill mastery

## 1. INTRODUCTION

Physical education plays a strategic role in enhancing students' physical abilities, movement skills, and character development (Mustafa et al., 2019). One way this is implemented in schools is through sports extracurricular activities, which not only serve to develop students' talents and interests but also foster discipline, sportsmanship, and perseverance. Wrestling, as one of these sports, can be effectively taught through such programs, requiring strength, technique, precise movement, and strategic thinking. This makes structured and systematic coaching, particularly in basic techniques, essential (Syalomita Elsaday Pompayo et al., 2024).

Several studies have emphasized the importance of physical fitness and basic movement training in improving sport-specific technical skills for young athletes. For

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instance, Nugroho et al. (2024) reported that fitness training enhances soccer shooting skills, while Karyono and Paluris (2022) found that basic movement exercises improve agility in badminton players. Similarly, Ahady et al. (2024) highlighted that physical conditioning supports better footwork technique, and Ardyansyah & Fadhli (2024) showed that mastery of motor skills is closely linked to improved shooting performance in youth soccer players. Targeted practice, such as shooting drills, also contributes to better skill acquisition (Saputra, Siswanto, & Nugroho, 2020). Collectively, these studies underscore the importance of structured training programs to develop both general motor competence and sport-specific abilities.

In wrestling, mastery of basic techniques forms a critical foundation for optimal performance. The smuggling (penetration) technique, which involves moving down or sideways to gain an advantageous position over an opponent, is particularly important as it affects maneuverability, control shifts, and point scoring (Bobby et al., 2022). Therefore, intensive, progressive, and developmentally appropriate training is required. Systematic training tailored to students' initial abilities has been shown to be more effective than conventional methods (Prasaja, Widiastuti, & Samsudin, 2024). Challenges often include hand-foot coordination, as poor coordination can hinder proper technique and increase injury risk (Magill, 2014), while balance and body control are critical for maintaining positions during offensive and defensive maneuvers (Tai & Tai, 2021; Science & Sports, 2022).

Despite its importance, current coaching practices often lack structured training models for smuggling techniques. Previous research has demonstrated the value of structured training models for wrestling and other combat sports. For example, Prasaja, Widiastuti, and Samsudin (2024) developed an arm slam training model using an R&D approach, validating its effectiveness in improving basic skills. Aprindo and Wicaksono (2025) highlighted the importance of systematic assessment of outer-hook takedown techniques, while Guliyeu (2021) provided theoretical foundations for technical and grip training in freestyle wrestling. Ilhomjon ugli (2025) introduced video analytics for objective skill evaluation. Other studies stress the role of descriptive quantitative and R&D-based approaches in developing structured technique training (Supriadi, 2023; Shodiq & Fadhli, 2024; Silalahi, Nugraha, & Akhmad, 2019). Research from other sports (Syukur et al., 2021; Itu et al., 2023) also shows that R&D-based models improve beginners' technical mastery. Functional training methods enhance balance, a key factor in wrestling (Tai & Tai, 2021), and coordination-focused programs improve movement accuracy (Priyambada et al., 2023; Hasbillah, Sudarmanto, & Fatoni, 2024; Löklüoğlu, Yılmaz, Özcan, & Tatlıcı, 2024). Proprioception and dynamic balance performance in freestyle and Greco-Roman wrestlers, revealing that while lower-body balance measures were similar between the two styles, upper-body balance and proprioceptive accuracy differed significantly (Norasteh, Mirzaei, & Zarei, 2022)

However, many schools, including SMAN 6 Bandar Lampung, still face challenges in delivering systematic, student-centered basic technique training. Current practices often rely on demonstration and repetition without structured exercises, limiting mastery of smuggling techniques and reducing competitive performance. Students also vary in physical abilities, motivation, prior experience, and skill levels, making it difficult for coaches to deliver effective training. A needs analysis is therefore critical to assess students' characteristics, training requirements, and learning conditions, forming the foundation for designing a contextual, developmentally appropriate, and effective training model.

Such a training model can increase student motivation, provide appropriately challenging exercises, and ultimately improve technical skill acquisition. Moreover, mastery of basic wrestling techniques enhances students' competitive performance and reflects the quality of the school's physical education programs. Based on these conditions, this research

aims to analyze the needs for developing a basic technique training model for wrestling extracurricular students at SMAN 6 Bandar Lampung, providing a basis for creating an effective, structured, and field-appropriate training program to optimize skill development and sports achievements.

## 2. METHOD

This study "uses a quantitative descriptive method with a needs assessment approach" to obtain an empirical understanding of the current implementation of basic technique training in the wrestling extracurricular program at SMAN 6 Bandar Lampung (Taherdoost, 2018; Sharma & Sharma, 2022). The needs assessment "is carried out to identify the gap between the expected ideal conditions and the real conditions in the field," ensuring that the results can form the basis for designing an appropriate training model tailored to the students' characteristics (Herdian & Mustaqim, 2021; Halim & Razak, 2021; Adewuyi et al., 2020).

This study applied a descriptive quantitative design, using structured questionnaires based on a Likert scale, observations, and interviews to quantify students' perceptions and identify their training needs (Nawi & Salim, 2018; Shaw & Holland, 2019; Wibowo & Suryanegara, 2022). The descriptive quantitative approach enables objective measurement of variables without manipulating the study environment, providing a clear picture of current conditions (Etikan, Musa, & Alkassim, 2016).

The research subjects consisted of "19 students participating in the wrestling extracurricular program," selected through total sampling, as all active members of the population were included. Data were collected using three main techniques: (1) observation, to assess the process and quality of training implementation; (2) interviews with coaches, to gain detailed information regarding the coaching program; and (3) a questionnaire based on a five-point Likert scale (1 = disagree to 5 = strongly agree), to identify students' needs and guide the development of a suitable training model.

The study subjects amounted to 19 students participating in the wrestling extracurricular program, which was determined through the total sampling technique, because all members of the population were actively involved in exercise activities. Data collection was carried out through three techniques, namely observation to assess the process and quality of the training implementation, interviews with trainers to obtain in-depth information about the coaching program, and a questionnaire based on a five-category Likert scale (1 = disagree to 5 = strongly agree) to identify students' needs for the development of the training model.

The data obtained was analyzed quantitatively using the percentage and mean formulas to determine the tendency of exercise needs. The formula used is:

$$P = \frac{f}{N} \times 100$$

$$\bar{X} = \frac{\sum X}{N}$$

Remarks:

P= Percentage,

f= Frequency of answers,

N= Number of respondents (19 students),

$\bar{X}$  = Average score,

$\sum X$  = Total score.

The results of the average calculation are then interpreted in the category of need level to determine the urgency of developing a relevant, directed, and applicable basic technique training model for extracurricular participants.

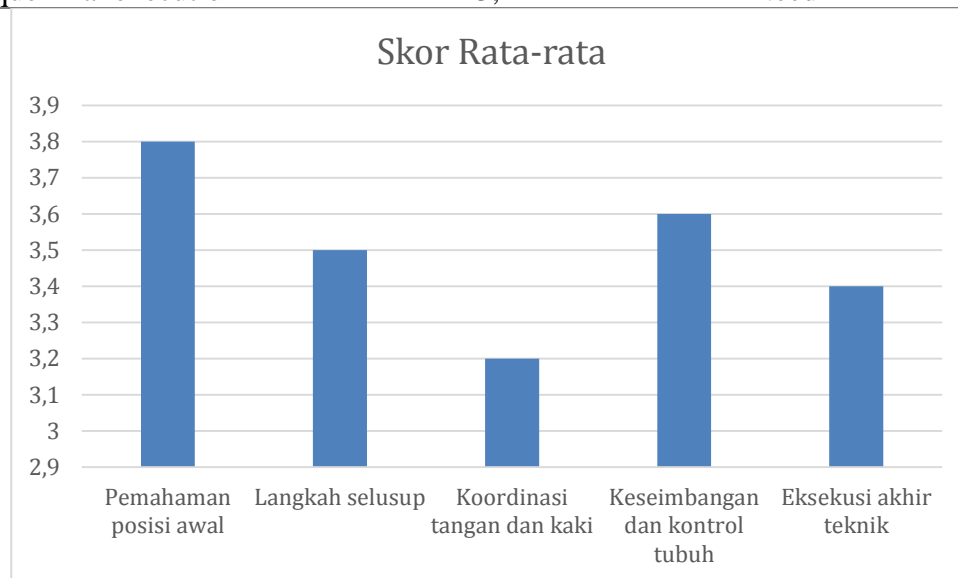
### 3. RESULT AND DISCUSSION

#### Result

The results of the data processing of the questionnaire on the need for the development of basic techniques showed that all aspects of engineering had an average score above 3.0, which means that students need to develop a structured training model. Details of the data can be seen in Table 1.

**Table 1.** Average Basic Technique Development Needs

Aspects of Selusup Technique	Average Score	Category
Understanding the initial position	3,8	Need
Step by step	3,5	Need
Hand and foot coordination	3,2	Quite Need
Balance and body control	3,6	Need
Technique final execution	3,4	Need



**Figure 1.** Needs Analysis Results

The graph shows that the initial position understanding aspect obtained the highest average score (3.8), while the coordination of hand and foot movements received the lowest score (3.2).

The results of the study show that the mastery of basic techniques in the wrestling extracurricular students of SMAN 6 Bandar Lampung is still not optimal and requires the development of a more systematic training model. The initial position understanding aspect had the highest score, which showed that students had basically understood the basic principles of body preparation in wrestling techniques (Asmi, 2016). However, this understanding has not been fully implemented in good movement practice, as some students still have difficulty maintaining a stable posture when starting the sepulsion stage.

The aspect of strides and balance of body control also showed a fairly high value but remained in the "need" category. This indicates that students are able to perform the stages of

engineering in general, but do not have good continuity and stability of movement. In wrestling, the ability to maintain balance and body control is an important requirement to avoid counterattacks, so training should be directed at strengthening the core stability and developing movement transition skills.

The lowest average score was found in the aspect of hand and foot coordination (3.2). These results show that students have not fully mastered the integration of sloppy movement patterns that require timing, rhythm, and body agility. The lack of variety of exercises and the dominance of simple demonstration and repetition methods can be factors that affect the development of optimal coordination of movement. Thus, a training model is needed that prioritizes a progressive approach, starting from basic drill exercises to situational exercises that resemble match conditions.

The aspect of the final execution of the technique which is in the category of "need" indicates that students still have difficulty locking and finalizing the technique after committing a smuggling. In fact, the final phase is the stage that determines the success of obtaining points or knocking down the opponent in the match. This reinforces that the exercise should include a gradual simulation from the opening movement to the finishing movement.

## **Discussion**

The results of the study by Prasaja, Widiastuti, and Samsudin (2024) indicate that the arm-slam skill training model developed for beginner wrestlers significantly improved their technical performance. This finding aligns with previous research emphasizing the importance of structured and systematic training models in enhancing the mastery of basic wrestling techniques. One of the critical findings is that tailored training programs, which are adjusted according to the students' initial abilities and skill levels, are more effective than conventional training methods. This is consistent with the principles of needs assessment in sports education, where identifying the gap between current skills and desired competencies allows for the design of interventions that target specific weaknesses (Shaw & Holland, 2019; Wibowo & Suryanegara, 2022).

The study also highlights the role of motor coordination and balance in executing wrestling techniques effectively. The improvement in arm-slam performance suggests that focusing on coordination drills and controlled technical exercises can enhance the accuracy and consistency of movements, which is supported by research on motor skill learning (Tai & Tai, 2021; Löklüoğlu et al., 2024). Moreover, the successful implementation of this model indicates that practical, sport-specific training interventions in school extracurricular programs can significantly contribute to skill development. This finding has practical implications for physical education teachers and wrestling coaches, emphasizing the need for systematic, progressive, and student-centered training approaches to maximize skill acquisition and overall athletic performance.

In conclusion, the arm-slam skill training model provides an effective framework for beginner wrestlers, demonstrating that needs-based and structured practice can improve both technical proficiency and the athletes' confidence in performing complex movements. Future studies could expand this model to other wrestling techniques or compare its effectiveness with other traditional or functional training programs to further validate its applicability in various contexts.

## **4. CONCLUSION**

Based on the results of the analysis of the needs of 19 students participating in the wrestling extracurricular at SMAN 6 Bandar Lampung, it can be concluded that the basic technique of scuba diving still requires development in all aspects of skills. The aspects with

the highest need are in the coordination of hand and foot movements and the final execution of the technique, while the understanding of the initial position indicates the highest score but remains in the category of need reinforcement. This shows that the training process that has been carried out so far has not been fully structured and has not provided progressive stages of technical learning. Therefore, it is necessary to prepare and apply a systematic, gradual, and consistent basic technique training model in accordance with the characteristics of students' abilities to increase

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