



# International Journal of Physical Education, Sports and Health

P-ISSN: 2394-1685

E-ISSN: 2394-1693

Impact Factor (RJIF): 5.38

IJPESH 2024; 11(5): 241-250

© 2024 IJPESH

<https://www.kheljournal.com>

Received: 04-07-2024

Accepted: 03-08-2024

**Muhammad Bashori Afnan**  
Faculty of Sport and Health  
Sciences, Yogyakarta State  
University, Yogyakarta,  
Indonesia

**Siswantoyo**  
Faculty of Sport and Health  
Sciences, Yogyakarta State  
University, Yogyakarta,  
Indonesia

**Tomoliyus**  
Faculty of Sport and Health  
Sciences, Yogyakarta State  
University, Yogyakarta,  
Indonesia

**Corresponding Author:**  
**Muhammad Bashori Afnan**  
Faculty of Sport and Health  
Sciences, Yogyakarta State  
University, Yogyakarta,  
Indonesia

## Development of manual book for the basic technique training of short stick of Perpi Harimurti

**Muhammad Bashori Afnan, Siswantoyo and Tomoliyus**

DOI: <https://doi.org/10.22271/kheljournal.2024.v11.i5d.3526>

### Abstract

This research is a study related to the development of bare hand techniques and weapons techniques aims for producing a development product in the form of "Manual Book of Short Stick Training of Perpi Harimurti". This research used the Research and Development (R&D) method with Sugiyono's Ten Steps Development Model Design. The research population and sample were Dewan Pendekar Perpi Harimurti (Perpi Harimurti Fighters Council) as a source of product development information, lecturers of Yogyakarta State University as expert trials, and Perpi Harimurti trainers and students as small group and field trials. The data collection techniques were interviews and observations in collecting product information, and closed and open questionnaires in expert trials, and small group, and field trials. The data analysis technique was descriptive qualitative analysis. This research aimed in producing a development product in the form of a training book for the trainers to train Perpi Harimurti students. Apart from that, this research also aimed at determining the feasibility and effectiveness of using the development product. The result of this research is the development product in the form of "Manual Book of Short Stick Training of Perpi Harimurti". The feasibility test for the development product obtain the "very feasible" category. The effectiveness test for using the development product obtain the "very feasible" category, which means that the development product is effective when it is used as training material.

**Keywords:** Books, Pentjak tedjokusuman, Perpi Harimurti.

### Introduction

Indonesia is a country that has a diversity of arts and culture. The diversity of arts and culture in Indonesia has developed rapidly through various periods. One of the famous arts and cultures in Indonesia is Pencak Silat. "Pencak Silat as a traditional sport reflected in martial arts in Indonesia is an object of advancing Indonesian culture" Sutantri (2018, p. 28) [22].

One of the Pencak Silat College that was born in the Special Region of Yogyakarta is Perpi (Indonesian Pencak College) Harimurti. Perpi Harimurti is a college that follows the Pentjak Tedjokusuman flow. Perpi Harimurti's professors are Raden Mas Harimurti as a source of knowledge for Pentjak Tedjokusuman and Raden Soekowinadi as the originator and shaper of the organization. Apart from that, R. Soekowinadi is also one of the originators of the Alphabet method in Pentjak Tedjokusuman.

The basic technique of Pentjak Tedjokusuman which uses the Alphabet method in Perpi Harimurti's science is very rich and makes the body of science in the college very broad. Perpi Harimurti's basic techniques can be classified into two, namely basic empty hand techniques and basic weapon techniques. In Perpi Harimurti's 2020 integrated curriculum book, it is stated that Perpi Harimurti's basic weapon techniques consist of various types of weapons, including short stick, toya/long stick, cabang/trident/tek bie, keris, sickle, spear, folding fan, throwing weapons, and rose ring strap [14]. Apart from studying empty hand and weapons movements, in his scientific knowledge, Perpi Harimurti also studied other sciences such as spirituality, breathing, and various other very broad sciences.

R. Soekowinadi's leadership continued through various periods which brought various advances in Perpi Harimurti. Under the leadership of R. Soekowinadi, Perpi Harimurti gave birth to various branch training units which continue to develop to this day.

After R. Soekowinadi's death, all matters relating to Perpi Harimurti's knowledge were handed over to the elders and the fighters council as the most senior person in scientific matters after R. Soekowinadi. The elders and the fighters council taught all of Perpi Harimurti's knowledge to the students at that time. However, at this time, due to advancing age, the elders and the fighters council can no longer train directly to Perpi Harimurti's students. The distribution of Perpi Harimurti's knowledge is currently not running smoothly. Perpi Harimurti students are currently using Perpi Harimurti's knowledge from trainer cadres in each branch of the training unit which has been eroded by generational renewal. Confusion among the Perpi Harimurti trainer cadres also occurs regarding the authenticity of the educational materials that will be given to Perpi Harimurti students, apart from that, losses also occur to the students because they cannot learn the authenticity of the Alphabet method in the Pentjak Tedjokusuman Perpi Harimurti which is currently owned by the elders and the fighters council.

The authenticity of Perpi Harimurti can be learned by visiting the elders and the fighters council directly. This can be done by the trainer Perpi Harimurti coming to the elders and the fighters council to gain knowledge. However, it is very ineffective if the trainers come to the elders and the fighters council one by one or in groups because both parties have to spend quite a lot of time, money, and energy. Apart from that, the total number of trainers from each branch of the Perpi Harimurti College is quite large, which makes this difficult to do.

Based on this problem, the researcher thought that this could be overcome by developing a Manual Book for Training. The material chosen in developing this book is The Basic Technique Training of Short Stick. This is because basic weapons techniques material is material that is rarely taught to Perpi Harimurti students, this is caused by a lack of information among trainer cadres regarding this material. The material on The Basic Technique Training of Short Stick was chosen because this material was the weapon material studied for the first time at the Perpi Harimurti level, namely at level II/cadre I/yellow belt according to the Perpi Harimurti 2020 integrated curriculum book. <sup>[14]</sup> The Basic Technique Training of Short Stick is the easiest weapon to learn, the safest because it is a blunt weapon, and can be found anywhere in a dangerous situation, such as a wooden stick which resembles a short stick weapon and can be used as a self-defense tool.

This research uses the R&D method (*Research and Development*) which focuses on Research regarding scientific exploration of The Basic Technique Training of Short Stick of Perpi Harimurti, as well as product development in the form of developing a Manual Book for Training for the material to be researched. This book will be entitled "Manual Book for The Basic Technique Training of Short Stick of Perpi Harimurti". Before conducting this research, a study needs to be carried out to strengthen that this research needs to be carried out. This study was carried out using survey, interview and questionnaire methods before conducting the research.

The survey method carried out before conducting the research was using documentation searches and existing previous research. From a search for existing documentation, the results were found that The Basic Technique Training of Short Stick of Perpi Harimurti is contained in Perpi Harimurti's 2020 Integrated Curriculum book which is studied at level two, namely yellow belt (Kader I) <sup>[14]</sup>, and from a search of existing previous research, it was found that no research had been found that discussed The Basic Technique

Training of Short Stick of Perpi Harimurti.

The interview method carried out before conducting the research was by asking one of the trainer cadres about several things related to The Basic Technique Training of Short Stick of Perpi Harimurti. The trainer cadre who was interviewed was Abid Aufa Amrullah and information was obtained that there were difficulties in training students on The Basic Technique Training of Short Stick of Perpi Harimurti material due to the trainer cadre's lack of knowledge about this matter, the trainer cadre had not found a book discussing this matter, and it was really needed development of a book related to The Basic Technique Training of Short Stick of Perpi Harimurti training material.

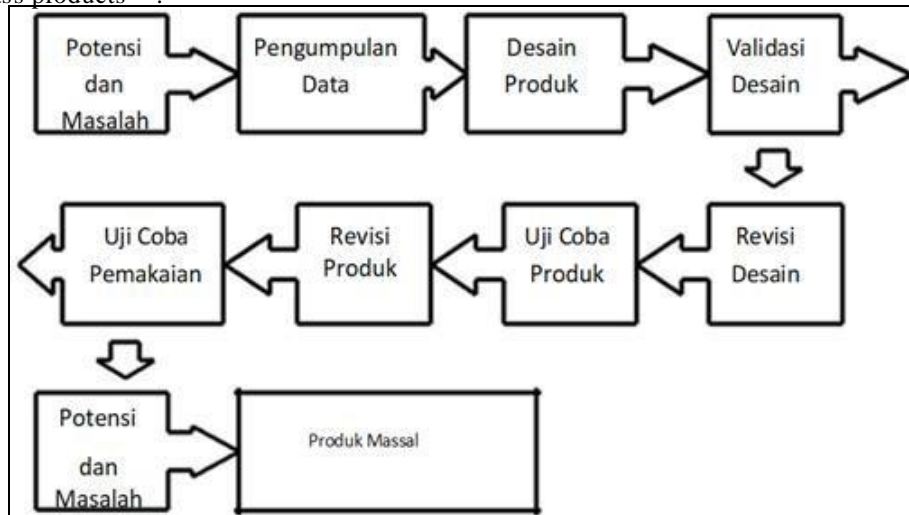
The questionnaire method used before conducting the research was by asking questions to Perpi Harimurti's students. This question was asked using a closed questionnaire to 40 Perpi Harimurti students. The results obtained from the first question regarding students' knowledge regarding The Basic Technique Training of Short Stick of Perpi Harimurti, 7 students or 17.5% answered that they knew, and 33 students or 82.5% answered that they did not know. The results obtained from the second question regarding students' knowledge regarding The Basic Technique Training of Short Stick of Perpi Harimurti consisting of Techniques with one stick and two sticks, 7 students or 17.5% answered that they knew, and 33 students or 82.5% answered that they did not know. The results obtained from the third question were about students' experiences regarding whether or not they had ever been taught The Basic Technique Training of Short Stick of Perpi Harimurti, 2 students or 5% answered that they had been taught, and 38 students or 95% answered that they had never been taught. The results obtained from the fourth question were about students' experiences regarding whether or not they had ever read a book that discussed The Basic Technique Training of Short Stick of Perpi Harimurti, 0 students or 0% answered that they had read it, and 40 students or 100% answered that they had never read it. The results obtained from the fifth question regarding students' opinions regarding whether or not research and development on "Development of Manual Book for The Basic Technique Training of Short Stick of Perpi Harimurti" is necessary, 40 students or 100% answered that it was necessary, and 0 students or 0% answered that it was not necessary.

From the studies that had been carried out before conducting the research, it was concluded that this research needed to be carried out. Therefore, it is necessary to carry out a more in-depth study regarding the research and development of "Development of Manual Book for The Basic Technique Training of Short Stick of Perpi Harimurti".

### Materials and Methods

This research uses the method *R&D (Research and Development)* or research and development. This method is intended to examine all information obtained from research subjects related to The Basic Technique Training of Short Stick of Perpi Harimurti and create a development product in the form of a book entitled "Manual Book for The Basic Technique Training of Short Stick of Perpi Harimurti". Operational procedures in the R&D method (*Research and Development*) is a procedure used to compile a development product from research data. The operational procedures used in this research use Sugiyono's ten-step development model in (Meidyantoro 2020, p. 19), namely potential and problems, data collection, product design, design validation, design revision, product trial, product revision, usage trial, potential

and problems, and mass products [8].



Source: Sugiyono in Meidyantoro (2020, p. 19) [8]

**Fig 1:** Ten Step Development Model Design

The place where this research was carried out was at Perpi Harimurti as a college which owns Pentjak Tedjokusuman The Basic Technique Training of Short Stick using the Alphabet method and where feasibility trials were carried out in small groups and in the field, apart from that the place of this research was carried out at Yogyakarta State University as a place to test the feasibility of material experts and media experts regarding the products to be developed. The time for this research to be carried out starts from December 28, 2022 to November 8, 2023. The test subjects in this research were Trainer and Student Perpi Harimurti. The instruments used were interviews and observations with information sources, and closed and open questionnaires with material experts, media experts, Perpi Harimurti trainers and Perpi Harimurti students. The data analysis technique used in interviews and observations with sources of information is by recording and processing the data into the development product "Manual Book for The Basic Technique Training of Short Stick of Perpi Harimurti" and in questionnaires to Material Experts, Media Experts, Perpi Harimurti Trainers, and Students Perpi Harimurti is with a Likert Scale 4 Suharsimi Scale in (Iskandar, 2020, pp. 42-43) with modifications [41] as follows:

**Table 1:** Feasibility Score

No.	Score	Information
1.	Score 4	Very Worth It
2.	Score 3	Worth it
3.	Score 2	Not feasible
4.	Score 1	Totally Not Worth It

The completed questionnaire is then calculated using the following formula:

$$P = \frac{\sum x}{N} \times 100\%$$

Information:

P : Percentage gain (percentage yield rounded)

$\sum x$  : The number of selected scores

N : Shoes Ideal

The criteria for the level of eligibility assessed are explained in the following Table.

**Table 2:** Eligibility Level Criteria

No.	Eligibility Rate (%)	Qualification	Information
1.	76%-100%	Very good	Very Worth It
2.	56%-75%	Good	Worth it
3.	40%-55%	Less Good	Not Worth It
4.	<40%	Very Not Good	Not feasible

Apart from that, the data analysis technique used in the questionnaire was carried out by processing qualitative data in the form of criticism and suggestions which were used to improve the book.

### 3. Results and Discussion

#### 3.1 Results

##### 3.1.1 Product Planning

Initial product planning was carried out by asking for advice from experts in the field, namely Prof. Dr. Siswantoyo, B.Pd., M.Kes and it was suggested that the theme raised in this research was Perpi Harimurti's short stick weapon. This is because the science that is least studied is weapons science, besides that short stick weapons are the first weapons studied in Perpi Harimurti which makes the scientific position of short stick weapons very important. Apart from that, short stick weapons are also categorized as having a high level of safety when studied, this is because this weapon is a blunt weapon and does not have the potential to injure oneself when played with.

After receiving advice from experts in their field, researchers looked at opportunities to solve the problem. The solution given by researchers is to carry out scientific research again with the parties who know best about this at this time. This is also due to other problems that occur within the scope of Perpi Harimurti. The problem that occurs is the lack of smooth distribution of knowledge within Perpi Harimurti. This happened because of various factors that influenced it, one of which was the too far between generations between the elders and Perpi Harimurti's fighters council and Perpi Harimurti's trainer cadre. The elders and the fighters council are the parties who know the knowledge best in Perpi Harimurti at this time. This means that the knowledge possessed by the current coaching cadre has been eroded by each generation. This erosion of knowledge, if not immediately addressed, could cause various kinds of new problems for the quality of future trainer cadres.

In the next stage, confirmation was carried out that this research was necessary and had never been carried out using survey, interview and questionnaire methods. The survey was carried out by searching for documentation and previous research, the results of the documentation search showed that The Basic Technique Training of Short Stick of Perpi Harimurti were found in Perpi Harimurti's 2020 Integrated Curriculum book at level II, namely yellow belt (Kader I) and the results of previous research searches showed that no research had been found discusses The Basic Technique Training of Short Stick of Perpi Harimurti. Next, an interview was conducted with one of the trainer cadres, namely Abid Afa Amullah, and the results showed that there were difficulties in training students regarding training material on The Basic Technique Training of Short Stick of Perpi Harimurti, due to the current trainer cadre's lack of knowledge about this matter, no books were found that discussed this matter, and it is very necessary to develop books related to training materials that discuss this matter. Then finally, questionnaires were distributed to 40 Perpi Harimurti students with 5 questions. The results of the first question regarding students' knowledge regarding The Basic Technique Training of Short Stick of Perpi Harimurti, 7 students or 17.5% answered that they knew, and 33 students or 82.5% answered that they did not know. Then the results of the second question regarding students' knowledge regarding The Basic Technique Training of Short Stick of Perpi Harimurti consisted of techniques with one stick and two sticks, 7 students or 17.5% answered that they knew and 33 students or 82.5% answered that they did not know. The results obtained from the third question were about students' experiences regarding whether or not they had ever been taught The Basic Technique Training of Short Stick of Perpi Harimurti, 2 students or 5% answered that they had been taught and 38 students or 95% answered that they had never been taught. The results obtained from the fourth question were about students' experiences regarding whether or not they had ever read a book that discussed The Basic Technique Training of Short Stick of Perpi Harimurti, 0 students or 0% answered that they had read it and 40 students or 100% answered that they had never read it. Next, the fifth question was about students' opinions regarding whether or not research and development was necessary on "Development of Manual Book for The Basic Technique Training of Short Stick of Perpi Harimurti", 40 students or 100% answered that it was necessary and 0 students or 0% answered that it was not necessary. So from the results of the questionnaire obtained it can be concluded that research needs to be carried out with the development of the product "Manual Book for The Basic Technique Training of Short Stick of Perpi Harimurti" as training material aimed at trainer cadres to train Perpi Harimurti students.

### 3.1.2 Preliminary Product Manufacturing

The initial product creation began with collecting data from sources of information regarding The Basic Technique Training of Short Stick of Perpi Harimurti. The source of information in the development of the Manual Book for The Basic Technique Training of Short Stick of Perpi Harimurti is Sarjono Cipto Hardjono, who is on the Perpi Harimurti fighters council. After the data is collected, the data obtained is combined and summarized, then a development product in the form of a book is prepared. After the book development product is prepared as an initial image, it is taken and edited by adjusting the brightness, size and deletion *background*, and

composing photos using *software Microsoft Word 365 Education UNY Account*. Apart from that, the cover was made using *software Corel Draw Graphics Suite 2022*. Specifications of the development product "Manual Book for The Basic Technique Training of Short Stick of Perpi Harimurti" in-*design* using A5 size (21 cm X 14.8 cm), the basic color of the book developed is white, the paper used in the *cover* development book is *ivory 260 gsm* accompanied by lamination *doff* with a light base color, the paper used in the contents of the development book is *book paper 7,2 gsm*, this book consists of several sub-titles, namely the front cover, thank you notes, Perpi Harimurti's pledges, foreword, table of contents, list of pictures, list of appendices, chapter I, chapter II, chapter III, chapter IV, bibliography, author profile, editor profile, appendices and back cover.

### 3.1.3 Expert Validation

After the initial creation of the development product "Manual Book for The Basic Technique Training of Short Stick of Perpi Harimurti" was completed, a series of trials were carried out with experts in Pencak Silat technique material, namely Prof. Dr. Awan Hariono, S.Pd., M. or., expert in learning media, namely Prof. Dr. Erwin Setyo Kriswanto, S.Pd., M.Kes to test the feasibility level of the development product. Validation was carried out in two stages with the following validation results:

#### 3.1.3.1 Data from Product Validation Results by First Stage Experts

##### 3.1.3.1.1 Data from Product Validation Results by First Stage Material Experts

Validation of the development product was submitted to Prof. Dr. Awan Hariono, S.Pd., M. or as an expert in Pencak Silat technical material. This development product was validated by material experts in the first stage on June 12, 2023.

The results of validation calculations by material experts in the first stage obtained a feasibility level percentage of 87.5%. The feasibility level results above can be classified into the "very feasible" category. The material expert in this trial did not provide suggestions or comments. Therefore, trials can be carried out at the next stage of this product development.

##### 3.1.3.1.2 Data from Product Validation Results by Media Experts in the First Stage

Media expert validation in the first stage is carried out after the initial development product has been completed. Validation of the development product was submitted to Prof. Dr. Erwin Setyo Kriswanto, S.Pd., M.Kes as an expert in learning media. This development product was validated by media experts in the first stage on June 19, 2023.

The results of validation calculations by media experts in the first stage, the feasibility level percentage is 80%. The feasibility level results above can be classified into the "very feasible" category. Apart from providing expert assessments, media also provide suggestions and comments for improving product development further.

#### 3.1.3.2 Data from Product Validation Results by Second Stage Experts

Media expert validation in the second stage is carried out after validation in the first stage and product development improvements based on suggestions and comments by media experts have been carried out. This development product was validated by media experts in the second stage on July 10, 2023.

The results of validation calculations by media experts in the second stage obtained a feasibility level percentage of 93.3%. The feasibility level results above can be classified into the "very feasible" category. Media experts on this trial did not provide suggestions or comments. Therefore, product use trials can be carried out on this development product.

### 3.1.4 Revised Expert Validation

#### 3.1.4.1 Results Before Revision

An overview of the development product design before validation and revision are carried out *cover* and the pictures in the book are as follows:

##### 3.1.4.1.1 Cover Book

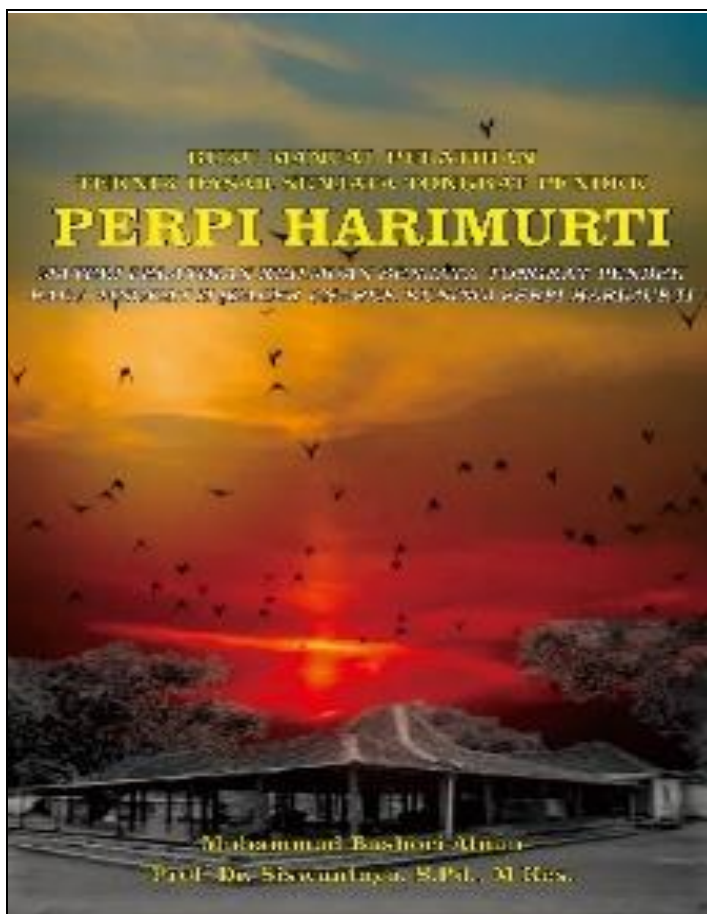


Fig 2: Cover Books before validation and revision

##### 3.1.4.1.2 Pictures in Books

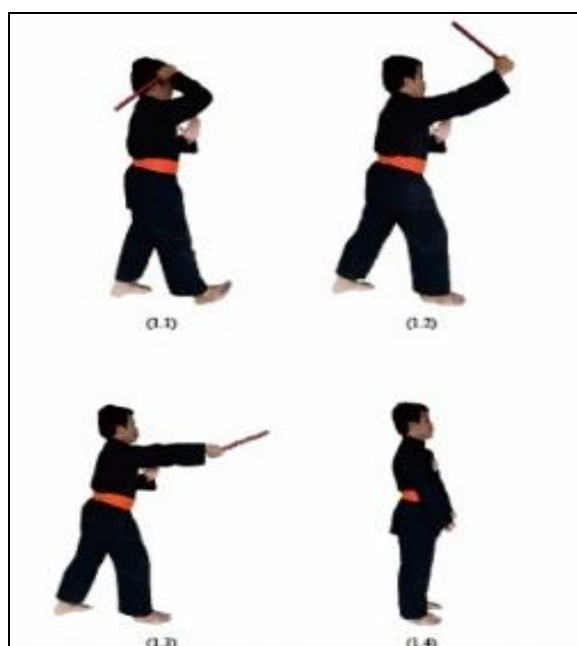


Fig 3: Images in the book after validation and revision

3.1.4.2 Results After Revision

3.1.4.2.1 Cover Book



Fig 4: Cover Book after validation and revision

3.1.4.2.2 Pictures in Books

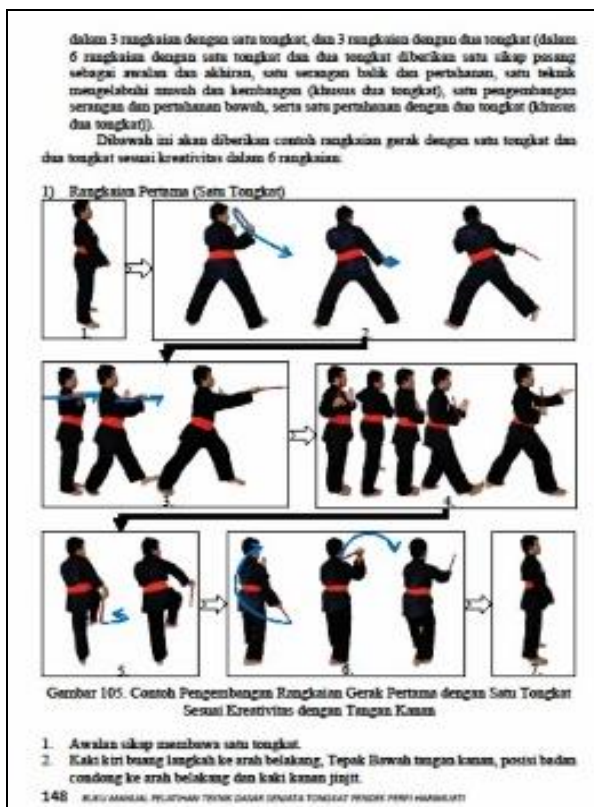


Fig 5: Images in the book after validation and revision

The development product in book form developed in this research was validated once by material experts and twice by media experts. In validation by media experts, the

development product underwent 1 revision based on the assessments, suggestions and comments provided. The development product in this research was declared feasible after validation was carried out. This development product gets *expert judgement* by material expert when carrying out the first stage of validation on June 12, 2023 and a media expert when carrying out the second stage of validation on July 10, 2023. After that, this development product was carried out in small group and field trials to determine the level of feasibility when applied on a larger scale broad, namely within the scope of Perpi Harimurti to be used as training material.

3.1.5 Product Use Trial Results

3.1.5.1 Small Group Trial Results Data

3.1.5.1.1 Data on Small Group Trial Results by Trainer Perpi Harimurti

This trial was held on July 12, 2023 with a total of 6 trainers. The eligibility percentage scored 88.5%. Therefore, this development product can be included in the "very feasible" category.

3.1.5.1.2 Data on Small Group Trial Results by Perpi Harimurti Students

This trial was held on July 12, 2023 with a total of 20 students. The eligibility percentage scored 90.8%. Therefore, this development product can be included in the "very feasible" category.

3.1.5.2 Data from Field Trial Results

3.1.5.2.1 Data from Field Trial Results by Coach Perpi Harimurti

This trial was held on September 25, 2023 with a total of 8

trainers. The eligibility percentage scored 92.6%. Therefore, this development product can be included in the "very feasible" category.

### 3.1.5.2.2 Data from Field Trial Results by Perpi Harimurti Students

This trial was held on September 25, 2023 with a total of 30 students. The eligibility percentage scored 94.2%. Therefore, this development product can be included in the "very feasible" category.

### 3.1.6 Potential, Problems, and Mass Products

The potential and problems that occur in this book are that this book can overcome problems that occur regarding the smooth learning of The Basic Technique Training of Short Stick of Perpi Harimurti, after which mass production can be made at UNY Press.

## 3.2 Discussion

The development product "Manual Book for The Basic Technique Training of Short Stick of Perpi Harimurti" at the beginning of development carried out initial product development design by taking 3 initial methods from Sugiyono's 10 Step Development Model Design by identifying potential problems that occurred, collecting data, and making an initial product design development. The potential problem that occurs in this research is that there is no training guide in the form of a book to overcome the long generation gap between the elders and Perpi Harimurti fighters council and Perpi Harimurti's trainer cadre at this time, especially regarding The Basic Technique Training of Short Stick. Apart from that, it was also found that there was a problem that The Basic Technique Training of Short Stick of Perpi Harimurti is still partial and unstructured which could result in a decline in the scientific quality of students and prospective trainer cadres in the future. Once the potential problems that occur are known, the next stage is to collect data from Perpi Harimurti elders and fighters council as the parties who know most about Perpi Harimurti knowledge. Data collection was carried out with one of Perpi Harimurti's elders and fighters council, namely the Perpi Harimurti fighters council Sardjono Tjptohardjono as a source of information by means of an interview and observation process which produced data which could then be processed into development products. After the data was collected, the next stage was to create a development product design and produce an initial product design "Manual Book for The Basic Technique Training of Short Stick of Perpi Harimurti".

Product development is then carried out by measuring the feasibility of the development product which is carried out by taking 2 methods from Sugiyono's 10 Step Development Model Design, namely design validation and design revision. Design validation was carried out in 2 stages with the initial stage carrying out design validation with Material Experts and Media Experts and the results obtained were that the development product was categorized as "very feasible" by Material Experts and Media Experts. In the first stage of design validation, the development product receives an expert judgment by a Materials Expert which indicates that the research can be continued to the next stage. Apart from that, there are also suggestions and comments provided by Media Experts so that design revisions must be made to the development product. After the design revision has been carried out on the development product, validation of the development product design is carried out in the second stage.

In this second stage of design validation, the development product has received the "very feasible" category and received expert judgment by Media Experts which indicates that the research can be continued to the next stage.

In the next stage of the development product, the effectiveness of use is measured using 3 methods from Sugiyono's 10 Step Development Model Design, namely testing the development product, revising the development product, and testing the use of the development product. The development product trial was carried out by means of a small group trial by means of training on The Basic Technique Training of Short Stick carried out by the trainer to Perpi Harimurti students based on the development product that had been given to the trainer and the results were obtained by submitting a questionnaire to the Perpi Harimurti trainer and students that The development product is categorized as "very feasible" and can be continued to the next stage. The next stage is carried out by revising the development product. Because the development product has received a "very feasible" assessment by trainer and student Perpi Harimurti and no suggestions or comments have been found, it can be continued to the next stage. The next stage was carried out by means of field trials by training on The Basic Technique Training of Short Stick carried out by the trainer for Perpi Harimurti students based on the development product that had been given to the trainer. This trial was carried out on trainers and students on a larger scale than the previous stage. In the field trial, results were obtained by submitting a questionnaire to Perpi Harimurti's trainers and students that the development product was categorized as "very feasible" and if there were no suggestions and comments from trainers and students, it could be continued to the next stage.

In the final stage of product development, it is carried out by taking the last 2 methods from Sugiyono's 10 Step Development Model Design, namely knowing the potential and problems that occur in development products, as well as mass products. The potential and problems found in the development product are the discovery of the potential that this development product can be used as a training manual, can be used as a reference by all Perpi Harimurti members, can facilitate scientific contributions, and can improve the quality of students and prospective cadres with the development product "Manual Book for The Basic Technique Training of Short Stick of Perpi Harimurti". In this development product, no problems were found so that the development product can be used as training material within the scope of Perpi Harimurti. Mass production is carried out at UNY Press.

## 4. Conclusions

### 4.1 Conclusions

From the research and development that has been carried out, it can be concluded that the development product "Manual Book for The Basic Technique Training of Short Stick of Perpi Harimurti" has been produced which contains scientific training material for short stick weapons at level II (cadre I/yellow belt) Perpi Harimurti. In the feasibility test, this development product received the "very feasible" category. In the effectiveness test, this development product received the "very appropriate" category, which means that the development product is effective when used as training material.

### 4.2 Appendix

**Table 1:** Results of material aspect assessment by first stage material experts

No.	Indicator	Evaluation			
		STL	TL	L	SL
1.	Suitability of the material with the title			√	
2.	Suitability of image to material			√	
3.	Material suitability				√
4.	Order of matter				√
5.	Match the title to the material			√	
6.	Meaningful use of material				√
7.	Image collapse				√

**Table 2:** Results of assessment of layout and writing aspects by first stage material experts

No.	Indicator	Evaluation			
		STL	TL	L	SL
1.	Accuracy of language selection			√	
2.	Layout accuracy				√
3.	Suitability of writing			√	

**Table 3:** Validation results by first stage material experts

No	Rated aspect	Score	Shoes Max	Percentage	Category
1.	Material Aspects as well as Layout and Writing	35	40	87,5%	Very Worth It
	Total Material Expert	35	40	87,5%	Very Worth It

**Table 6:** Results validated by first level media members

No	Rated aspect	Score	Shoes Max	Percentage	Category
1.	Appearance and Usability Aspects	48	60	80%	Very Worth It
	Total Media Members	48	60	80%	Very Worth It

**Table 7:** Results of evaluation of display aspects by second level media members

No.	Indicator	Evaluation		
		STL	TL	LSL
1.	Selection of paper size in training manuals			√
2.	Selection of paper type in training manuals			√
3.	Suitability of the image on the cover with the contents of the training manual			√
4.	Matching the background on the cover with the image on the cover of the training manual			√
5.	Selection of size and type of writing in training manuals			√
6.	Preparation of image layouts in training manuals			√
7.	Preparing the layout for writing in the training manual			√
8.	Preparation of the number of pages in the training manual			√
9.	The level of attractiveness of the training manual when used as a training guide by trainers			√
10.	The level of accuracy in selecting sentences used in the training manual is easy to understand			√

**Table 8:** Evaluation results of usability aspects by second level media members

No.	Indicator	Evaluation			
		STL	TL	LSL	SL
1.	The level of feasibility of making images in the training manual can explain the meaning of the written content			√	
2.	The level of feasibility for making images in the contents of the manual is easy for trainers to remember				√
3.	The level of clarity and ease of understanding for trainers regarding the preparation of implementation instructions in the training manual				√
4.	The level of feasibility if the training manual is used by the trainer as a training guide				√
5.	The level of suitability of the training manual if used independently by the trainer as a training guide				√

**Table 9:** Results of validation by second level media members

No	Rated aspect	Score	Shoes Max	Percentage	Category
1.	Appearance and Usability Aspects	56	60	93,3%	Very Worth It
	Total Media Members	56	60	93,3%	Very Worth It

**Table 10:** Small group trial results data by trainer Perpi Harimurti

No	Rated aspect	Score	Shoes Max	Percentage	Category
1.	Assessment of Product Development and Implementation	170	192	88,5%	Very Worth It
	Total	170	192	88,5%	Very Worth It



**Table 11:** Data from small group trial results by Perpi Harimurti students

No	Rated aspect	Score	Shoes Max	Percentage	Category
1.	Implementation Evaluation	218	240	90,8%	Very Worth It
Total		218	240	90,8%	Very Worth It

**Table 12:** Data from Field Trial Results by Coach Perpi Harimurti

No	Rated aspect	Score	Shoes Max	Percentage	Category
1.	Assessment of Product Development and Implementation	237	256	92,6%	Very Worth It
Total		237	256	92,6%	Very Worth It

**Table 13:** Data from Field Trial Results by Student Perpi Harimurti

No	Rated aspect	Score	Shoes Max	Percentage	Category
1.	Implementation Evaluation	339	360	94,2%	Very Worth It
Total		339	360	94,2%	Very Worth It

#### 4.2 Acknowledgements

The research and development that has been carried out and concluded above, has hopes including:

1. Can be used as scientific training material for The Basic Technique Training of Short Stick of Perpi Harimurti by trainers for students within the scope of Perpi Harimurti.
2. Can be used as a reference for all Perpi Harimurti members regarding the knowledge of The Basic Technique Training of Short Stick of Perpi Harimurti.
3. Can facilitate contributions to the completion of material, especially scientific material on The Basic Technique Training of Short Stick of Perpi Harimurti.
4. Can improve the quality of students and prospective Perpi Harimurti trainer cadres by completing the material, especially the scientific material on The Basic Technique Training of Short Stick of Perpi Harimurti contained in the development product of this research.

#### 5. References

1. Ariyanto D. Pengembangan sport tourism berbasis olahraga pencak silat di wisata alam kabupaten Gunungkidul [Master's thesis]. Yogyakarta: Universitas Negeri Yogyakarta; c2023.
2. Haryati S. Research and Development (R&D) sebagai salah satu model penelitian dalam bidang pendidikan. *Majalah Ilmiah Dinamika*. 2012;37(1):15-23.
3. Iskandar A. Pelatihan Teknik Dasar Perguruan Pencak Silat Perpi Harimurti [Master's thesis]. Yogyakarta: Universitas Negeri Yogyakarta; c2019.
4. Iskandar A. Pengembangan buku manual pelatihan teknik dasar Perguruan Pencak Silat Perpi Harimurti [Master's thesis]. Yogyakarta: Universitas Negeri Yogyakarta; c2020.
5. Kholis MN. Aplikasi nilai-nilai luhur pencak silat sarana membentuk moralitas bangsa. *Jurnal Sportif*. 2016;2(2):101-115.
6. Kriswanto ES. *Pencak Silat: Sejarah dan Perkembangan Pencak Silat Teknik-Teknik dalam Pencak Silat Pengetahuan Dasar Pertandingan Pencak Silat*. Yogyakarta: Pustakabarupress; c2015.
7. Kurniawan IA. Pengembangan bentuk latihan untuk meningkatkan kelincahan atlet disabilitas bulutangkis *Wheelchair* [Master's thesis]. Yogyakarta: Universitas Negeri Yogyakarta; c2023.
8. Mediyantoro E. Pengembangan latihan teknik servis tenis lapangan untuk pemula usia dini [Master's thesis]. Yogyakarta: Universitas Negeri Yogyakarta; c2020.
9. Mizanudin M, Sugiyanto A, Saryanto. Pencak silat sebagai hasil budaya Indonesia yang mendunia. In: *Prosiding Seminar Nasional Bahasa dan Sastra Indonesia (SENASBASA)*; c2018.
10. Muhyi M, Purbojati. Penguatan olahraga pencak silat sebagai warisan budaya Nusantara. *Jurnal Budaya Nusantara*. 2014;1(2):141-147.
11. Nor I, Anraeni S, Kurniati N. Sistem pendukung keputusan pemilihan calon wasit dan juri kategori (seni) terbaik IPSI (Ikatan Pencak Silat Indonesia) menggunakan metode Simple Additive Weighting (SAW). In: *Prosiding Seminar Nasional Komunikasi dan Informatika #3 Tahun 2019*; c2019.
12. Nugroho ED. Pengembangan alat pelontar bola multifungsi [Master's thesis]. Yogyakarta: Universitas Negeri Yogyakarta; c2016.
13. Pamungkas MA. Pengembangan instrumen tes akurasi difabel *Wheelchair* bulu tangkis [Master's thesis]. Yogyakarta: Universitas Negeri Yogyakarta; 2023.
14. PP. Perpi Harimurti. Kurikulum terintegrasi 2020 Perpi Harimurti (10 Perguruan Historis). Yogyakarta: Perpi Harimurti; c2020.
15. Pratama RY, Trilaksana A. Perkembangan Ikatan Pencak Silat Indonesia (IPSI) tahun 1948-1973. *E-Journal Pendidikan Sejarah*. 2018;6(3):1-10.
16. Purnama S. Metode penelitian dan pengembangan (pengenalan untuk mengembangkan produk pembelajaran bahasa Arab). *LITERASI (Jurnal Ilmu Pendidikan)*. 2016;4(1):19-32.
17. Putra FW, Siswantoyo. *Legenda Tokoh Pencak Silat Indonesia Eddie Marjoeki Nalapraya Major Jenderal TNI (Purn)*. Yogyakarta: LPPM Universitas Negeri Yogyakarta; c2018.
18. Santoso NP. Pengembangan model permainan untuk meningkatkan gerak dasar manipulatif dan kerjasama peserta didik sekolah dasar kelas bawah [Master's thesis]. Yogyakarta: Universitas Negeri Yogyakarta; c2023.
19. Sari MP. Pengembangan samsak sebagai alat tes ketepatan tendangan pada pesilat usia dini [Master's thesis]. Yogyakarta: Universitas Negeri Yogyakarta; c2020.
20. Siyoto S, Sodik MA. Dasar metodologi penelitian. Yogyakarta: Literasi Media Publishing; c2015.
21. Suhardinata. Upaya IPSI dalam menjaga, melestarikan, serta memasyarakatkan pencak silat di Indonesia dan mancanegara 1948-1997 [Master's thesis]. Semarang: Universitas Diponegoro; 2018.
22. Sutantri SC. Diplomasi kebudayaan Indonesia dalam proses pengusulan pencak silat sebagai warisan budaya takbenda UNESCO. *JIPSI-Jurnal Ilmu Politik dan Komunikasi UNIKOM*. 2018;8:27-42.

23. Tjiptohardjono S. *Dasar Tongkat Pendek*. Yogyakarta: Pustaka Karunia; 2020.
24. Trizkyana CK. Sejarah Aliran Pencak Tedjokusuman Ngayogyakarta (*The History of Flow of Pencak Tedjokusuman Ngayogyakarta*) [Master's thesis]. Yogyakarta: Universitas Negeri Yogyakarta; c2019.
25. Trizkyana CK. Pengembangan snack bar sebagai asupan alternatif selama proses latihan atlet pencak silat Kota Yogyakarta kelompok usia junior dan senior [Master's thesis]. Yogyakarta: Universitas Negeri Yogyakarta; c2023.