Feasibility Test of Hanging Sacks with Coconut Coir Waste Filling Materials for Martial Arts

Rizki Firdaus[1], Romi Mardela[2], Argantos[3], Yogi Setiawan[4]

[1,2,3,4]Universitas Negeri Padang, Padang, 21751, West Sumatra, Indonesia
*Corresponding Author: rizkifirdaus923@gmail.com

Abstract

Studi Purpose The problem in this study is the lack of interest among martial arts activists in utilizing sports equipment products that have not been proven to be of proven quality. Many factors cause it. For this reason, the researcher will only discuss the feasibility test of making hanging bags using coconut coir waste for martial arts. **Method** This type of research is qualitative, this research was carried out in January 2023. The population in the study is all athletes of the Indonesian Pariaman Satria Young Pencak Silat College which totals 32 athletes. Samples were taken only from 30 athletes by purposive sampling. Data collection using tests, with the following instruments: Using a Questionnaire. Test from martial artists and coconut fiber waste material processing experts. **Result and Discussion** The The results of the research are data analysis that illustrates the feasibility of Samsat Hanging With Coconut Coir Valley Stuffing Material for Pencak Silat Martial Arts Satria Muda Indonesia 1) Small Group Test has 5 people with a percentage of 17% of athletes interested in the very strong category, 25 athletes are categorized as Strong with a percentage of 83%. The percentage of Hanging Bag Eligibility from the results of martial artists 64% in the good category and the results of waste experts 86% are very good. 2) Martial artist test Based on the analysis of the martial artist test, the score obtained was 34, the maximum score was 50, the percentage was 64% Categorized Good. 3) Based on the analysis of the material processing expert test, the score was obtained 43, the maximum score was 50, the percentage of 86% was categorized as Very Good. Feasibility This tool is filled with coconut fiber valley filled with coconut fiber, and is even ready to be used without revision, this tool is also suitable for use in martial arts, and is even ready to be tested without revision.

Keywords: Feasibility Test; Coconut Coir Waste; Martial Arts

1. Introduction

A sack is a martial arts tool as a medium for attacking targets to train kicks and punches. Initially, the use of samsak was only focused on punch training aids in boxing, but as the era progressed, it was developed to train kicks and other variations of techniques so that it can be used in training other sports such as taekwondo, karate, muaythai, pencak silat and other types of martial arts

This research developed a tool that is commonly called a hanging bag as a means of practicing martial arts in improving the ability of punches and kicks in terms of strength and agreement as well as technique, but the shape of the hanging bag that we will research has several differences in manufacturing that will be applied in it, and will have advantages in terms of economic value, quality of care, and also the quality of the material which is more affordable/easy to find and is likely to be better than the shape of hanging bags in general. Therefore, the author wants to respond directly and make a study on "Feasibility Test of Hanging Bags with Coconut Coir Waste Filling Materials for Martial Arts".

2. Materials and Methods

The type of research that will be used in this study is quantitative research. This research was carried out at the Satria Muda Indonesia pencak silat college in Gor Aur, Pariaman City and the population in this study is all athletes who are active in the Satria Muda Indonesia pencak silat college which totals 32 athletes. Sampling in this study used Purposive and snowball sampling techniques. In accordance with the goal of the researcher, the type of data in this study consists of two primaries and secondary, primary data, namely data collected directly by the researcher from the sample through tests. Meanwhile, secondary data is data obtained from the biodata of athletes of the Satria Muda Indonesia Pencak Silat College, Pariaman City.

3. Result

The martial artist who became the validator in this study was Juanda Putra S.Pd, M.Pd. He is an educator at the Faculty of Sports Sciences, Padang State University. The researcher chose him to be the validator because of his competence in the field of martial arts, especially pencak silat martial arts. Data was obtained by showing baggage products along with evaluation sheets for media experts in the form of questionnaires. The questionnaire contains aspects of feasibility, size aspects, and aspects of whether it is feasible or not for training. The martial arts shooting was carried out on March 10, 2023. The material processing expert who became the validator in this study was Japri. He is a member of the coconut fiber material. The researcher chose him to be the validator because of his competence in coconut fiber materials. Data was obtained by showing baggage products along with evaluation sheets for media experts in the form of questionnaires. The questionnaire contains aspects of feasibility, size aspects, and aspects of whether it is

feasible or not for training. The martial arts shooting was carried out on March 10, 2023.

Table 1. Validation Test of Martial Arts and Material Processing Experts

NO	Aspects Assessed	Scores Obtained	Maximum score	Percentage	Categories
1	Martial arts	34	50	64 %	Good
2	Waste	43	50	86%	Excellent

Eligibility Test Of Hanging Bags And Coconut Filling Ingredients

Table 2. Frequency Distribution of Feasibility Test Data Results of Hanging Bags and Coconut Filling Materials

Yes	Interval	Category	Frequency(f)	Percentage(%)
1.	81%-100%	Very Powerful	5	17
2.	61%-80%	Strong	25	83
3.	41%-60%	Enough	0	0
4.	21%-40%	Weak	0	0
5.	0%-20%	Very weak	0	0
			30	100

Based on the distribution of data in the table above, the description of Indonesian young knight pencak silat can be seen from the samsat feasibility test obtained results of 5 people with a percentage of 17% of athletes interested in the very strong category, 25 students are categorized as strong with a percentage of 83%.

4. Discussion

4.1 Martial Arts Test

Based on the analysis of the martial arts expert test, the score was 34, the maximum score was 50, the percentage was 64% categorized as Good. From this data, the coconut filled bag is suitable for use as martial arts equipment, and is even ready to be tested without revision.

4,2 Material Management Expert Test

Based on the analysis of the material processing expert test, the score was obtained of 43, the maximum score was 50, the percentage of 86% was categorized as Very Good. From this data, coconut filled bags are already called feasible, and are even ready to be used without revision.

4.3 Small Group Test

Based on the results of data analysis that illustrates the feasibility of Samsat Hanging With Coconut Coir Valley Stuffing Material for Pencak Silat Martial Sports, Satria Muda Indonesia has 5 people with a percentage of 17% of athletes interested in the very strong category, 25 athletes are categorized as Strong with a percentage of 83%.

This development research produced a product in the form of a hanging bag with coconut fiber waste filling material for martial arts. Bagsak and its use have been developed and validated by media experts and pencak silat material experts. After it was validated by experts, it was continued to the trial stage to several silat fighters to get feedback on this bag product. The result is that the development of the bag as a kick accuracy test tool in this silat player is included in the "**Excellent" category** and is suitable for use. This statement can be proven from the results of the analysis of the assessment of both experts, both media experts and material experts, as well as in the assessment of the trial to the silat fighters, the Respondent felt enthusiastic about the existence of this product because the respondent was interested in using it in the implementation of kick accuracy.

There are advantages and disadvantages of this product. The advantages of this bag include (1) providing efficiency and effectiveness to the coach to provide precise kicks to the athletes. (2) can help adapt the accuracy of kicks in the fighter. (3) Related to materials is very practical and affordable prices can be used for martial arts bags.

5 Conclusion

5.1 Based on test Martial Arts

Based on the analysis of the martial arts expert test, the score was 34, the maximum score was 50, the percentage was 64% categorized as Good.

5.2 Test Material Management Experts

Based on the analysis of the material processing expert test, the score was obtained of 43, the maximum score was 50, the percentage of 86% was categorized as Very Good.

5.3 Small Group Tests

Based on the results of data analysis that illustrates the feasibility of Samsat Hanging With Coconut Coir Valley Filling Materials for Pencak Silat Martial Sports, Satria Muda Indonesia has 5 people with a percentage of 17% of athletes interested in the very strong category, 25 athletes are categorized as Strong with a percentage of 83%.

REFERENCES

Afrizal. (2018). Dayaledak Otot Tungkai Dan Kelentukan Berkontribusi Terhadap Akurasi *Shooting* Sepakbola. *Jurnal Performa Olahraga*, *3*(02), 81. https://doi.org/10.24036/jpo15019

Akbar, A., Donie, D., Ridwan, M., & Padli, P. (2021). Kontribusi Kelentukan, Keseimbangn dan Kekuatan Otot Tungkai Bawah dengan Kemampuan Service Atas Atlet Sepaktakraw. *Jurnal Patriot*, *3*(2), 107-119. https://doi.org/10.24036/patriot.v3i2.722.

Anita. (2021). The Effect Of Body Mass Index, Balance And Explosion On *Shooting* In Futsal. Jurnal Ilmu Keolahragaan 12 (02) 2021, 102-114 Permalink/Doi: Https://Doi.Org/10.21009/Gjik.122.03

Budiwibowo, F., & Setiowati, A.(2020) (1). Unsur Indeks Massa Tubuh Dan Kekuatan Otot Tungkai Dalam Keseimbangan. *Journal Of Sport Science And Fitness*, *4*(2). Https://Doi.Org/10.15294/Jssf.V4i2.6291.

Erick Burhaein. (2020). The Relationship of Limb Muscle Power, Balance, and Coordination with Instep *Shooting* Ability: A Correlation Study in Under-18 Football Athletes. International Journal of Human Movement and Sports Sciences 8(5): 265-270, 2020 http://www.hrpub.org DOI: 10.13189/saj.2020.080515.

Gustaman, G. P. (2019). Hubungan Footwork, Kekuatan Otot Tungkai Dan Tinggi Lompatan Terhadap Kemampuan Smash Bulutangkis. *JUARA : Jurnal Olahraga*, *4*(1), 1-8. https://doi.org/10.33222/juara.v4i1.512**.**

Jan Haut & Christian Gaum (2017): Does elite success trigger massparticipation in table tennis? An analysis of trickle-down effects in Germany, France and Austria, Journal of Sports Sciences, DOI: 10.1080/02640414.2017.1361895

Johan Pion, Veerle Segers, Job Fransen, Gijs Debuyck, Dieter Deprez, Leen Haerens, Roel Vaeyens, Renaat Philippaerts & Matthieu Lenoir (2014): Generic anthropometric and performance characteristics among elite adolescent boys in nine different sports, European Journal of Sport Science, DOI: 10.1080/17461391.2014.944875

Julien Fuchs (2017): Les colonies de vacances en France, 1944–1958: impulsions politiques autour d'un fait social majeur, Paedagogica Historica, DOI: 10.1080/00309230.2017.1287745

Lee Bell , Alan Ruddock , Thomas Maden-Wilkinson & David. Rogerson (2020): Overreaching and overtraining in strength sports and resistance training: A scoping review, Journal of Sports Sciences, DOI: 10.1080/02640414.2020.1763077

Mardela, R (2016) Keterampilan Gerak Dasar Siswa Paud Kota Padang. *Jurnal Performa Olahraga*, 1(02), 206-222, https://doi.org/10.24036/jpo87019

Maulana. (2020). Pengaruh Metode Bentuk Bermain dan Bentuk Latihan Terhadap Kemampuan *Shooting* Atlet SSB. *Jurnal Patriot*, *2*(1), 220-233. https://doi.org/10.24036/patriot.v2i1.635

Michael Fuchs, Ruizhi Liu, Ivan Malagoli Lanzoni, Goran Munivrana, GunterStraub, Sho Tamaki, Kazuto Yoshida, Hui Zhang & Martin Lames (2018): Table tenni smatch analysis: a review, Journal of Sports Sciences, DOI: 10.1080/02640414.2018.1450073

Prastyo, B. W., Sugiyanto, & Doewes, M. (2017). The Development Model Of The Basic Techniques Of Exercise And Physical Exercise On Futsal Players Level Intermediate. European Journal of Physical Education and Sport Science, 2(3), 50–58. https://doi.org/10.5281/zenodo.376857.

Ridwan, M., & Sumanto, A. (2017). Kontribusi Daya Ledak Otot Tungkai, Kecepatan dan Kelentukan Dengan Kemampuan Lompat Jauh. *Jurnal Performa Olahraga*, *2*(01), 69-81. https://doi.org/10.24036/jpo67019.

Riga Mardhika, 2017. Pengaruh Latihan Resistance Dan Pyometric Terhadap Kekuatan Otot Tungkai Dan Kelincahan Pada Atlet Futsal. Wahana Volume 68, Nomer 1, Issn 0853-4404, Https://Doi.Org/10.36456/Wahana.V68i1.626

Rozikin, A., & Hidayah, T. (2019) (1). Hubungan Fleksibilitas Dan Kekuatan Otot Tungkai Terhadap Hasil Tendangan Eolgol Dollyo-Chagi Pada Olahraga Taekwondo. *Journal of Sport Science and Fitness*, *4*(1). https://doi.org/10.15294/jssf.v4i1.6271.

Stosic, Dejan. 2019. Effects Ofan Exercise Program On The Coordination And Explosive Power of university Dance Students. *Physical Education And Sport*, Vol. 17, No 3, 2019, Pp. 579-589https://Doi.Org/10.22190/Fupes191016052s

Verdy Tri Aprian Nosa. (2019). Model Pembelajaran *Shooting* Futsal Untuk Siswa Sma. Jurnal Pendidikan Olahraga Vol.8, No.1, Hal 27-34, P-Issn: 2089-2829 E-Issn: 2407-1528, Doi: 10.3157/Jpo.V8i1.1218.

Yudi Nurcahya. (2020). Use of audio-visual media on training basic skills in passing and*shooting* in futsal sports. Journal of Physics: Conference Series 1521 (2020) 042050IOPdoi:10.1088/1742-6596/1521/4/042050