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Manipulative Basic Motion Learning Model for The Elementary School Level

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Abstract

The purpose of this study was to produce a manipulative basic motion learning model product at the elementary school level. This study uses a research and development method that adopts the theory of Borg and Gall which has 10 development steps. However, the research only reached the 7th step, namely Operational product revision. This research uses a descriptive qualitative approach. The results of this study are in the form of a manipulative basic motion learning model product at the elementary school level which has been proven to be suitable for use by elementary school level students because it has gone through the trial stages, namely the validation of experts and field trials both small-scale trials and large-scale trials. So it can be concluded that, the final product in this study is in the form of a manipulative basic motion learning model textbook that is feasible for use at school level students which are expected to be used as a reference in the physical education learning process at the elementary school level.

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INTRODUCTION

Learning Physical education, sports, and health are subjects that require students to do physical activities as a direct learning effort, where a student learns and practices the material and concepts of a lesson directly. (Ruzaman, 2018). Physical education must have been instilled since childhood because in general, if you want to master various kinds of activities. According to (BSNP, 2006) that one of the objectives of implementing physical education, sports, and health in elementary schools is to improve basic mobility skills and abilities. Basic movement skills in elementary school can be divided into several categories including three types, namely: locomotor, non-locomotor, and manipulation.

This research focuses on basic manipulative movements. The basic manipulative movement skills are the skills to control objects or objects, their movement activities are hitting, throwing, catching, rolling, and kicking. (Martinus & Kesumawati, 2020). Another opinion in research from (Hidayat, 2017) explains that "manipulative motion is a motion that is developed when the child is mastering various objects". Meanwhile, in the determination of (Hendra & Putra, 2019) concluded that "manipulative movement has a very important role in learning physical education, especially in sports that require doing some form of movement of the limbs more skillfully, such as football, volleyball, basketball, baseball and so on ".

Elementary school age is a time that determines physical growth and development and movement that plays an important role in the formation of quality individuals in the future. Elementary school-age children tend to move a lot. For the movement which is the child's need to achieve the expected results, it is necessary to have good planning. One of the characteristics of elementary school students is that elementary school children like to move. So one of the plans is to design or develop appropriate and attractive learning models for elementary school students. The learning model according to (Rusman, 2011) "is a plan or pattern that can be used to form a curriculum (long-term learning plans), design learning materials, and guide learning in class or otherwise". Meanwhile (Huda, 2013) argues that "the learning model should be considered a structural framework that can also be used as a guide to developing a conducive learning environment and activities".

As a physical education teacher in elementary schools, he must innovate by compiling and developing learning models that are in accordance with the characteristics of elementary school students, especially in basic motion material. Based on the results of observations that have been made in the elementary school 01 Banjit Way Kanan Lampung, students have difficulty in doing basic movements. (Eko, 2018) in his research which revealed that "in physical education, namely locomotor (moving motion), non-locomotor (motion does not move), and manipulative (a motion that requires hand and foot expertise), of the three basic movements, the basic manipulative is movement. basic which is difficult for students to learn because students are required to be able to coordinate eye-hand and eye-foot in order to be able to do punches and kicks ". In addition, innovative and creative basic motion learning models have not been implemented. Therefore the researcher seeks to design and develop a manipulative basic motion learning model. So that the expected learning objectives can be achieved. According to (Suherman, 2009) the objectives of physical education are generally declassified into four development goals, namely: 1) Physical development, 2) Development of motion. 3) Mental development. And 4) Social development.

METHODS

The type of research used in this research is research and development. "Research and Development (Research and Development) is a research method used to produce certain products and determine the impact of using these products" (Sugiyono, 2010). Meanwhile (Gall et al., 2010) defines, "research and development is an industry-based development model in which the findings of the research are used to design new products and procedures, which then are systematically field-tested, evaluated, and refined until they meet specified criteria of effectiveness, quality, or similar standards ". And Airasian in (Emzir, 2012) explains below, "in the field of education the main objective of research and development is not to formulate or test theories, but to develop effective products for use in schools".

This research uses a descriptive qualitative approach. The research and development steps are carried out in 10 stages that adopt the development model steps (Borg & Gall, 1983) which consist of, "1) Research and information collection, 2) Planning, 3) Develop Preliminary from the product, 4) Preliminary field testing, 5) Main product revision, 6) Main field testing, 7) Operational product revision, 8) Operational field testing, 9) Final product revision, 10) Dissemination and implementation ". However, this research is limited to the 7th step, namely Operational prod-

uct revision. The analysis technique used in this research is descriptive qualitative. The subjects in this study were 60 students of elementary school 01 Banjit Way Kanan Lampung. The instrument used in this research is to use an instrument in the form of a questionnaire or a product development feasibility questionnaire, namely; a) expert evaluation questionnaire; b) small and large scale test questionnaires. (Sukardi, 2011) explained that, "functionally the use of research instruments is to obtain the data needed when the researcher has stepped on the information gathering step in the field". According to (Sugiyono, 2016), "a questionnaire is a data collection technique that is carried out by giving a set of questions or a written statement which is done by giving a set of questions on written statements to respondents to be answered".

RESULTS AND DISCUSSION

Expert Validation Results

The product of the manipulative basic motion learning model was validated by 3 experts to assess the feasibility of the learning model that had been developed, namely 1 athletic expert, 2 Physical Education learning experts. The following conclusions from the expert test conducted are summarized in the following **Table 1**:

Table 1. Conclusion of Expert Test Results on Manipulative Basic Motion Learning Model for Elementary School Level

Kicked Model	Expert 1	Expert 2	Expert 3	Total Score	Percentage	Information
1	3	3	3	9	75.00%	Valid
2	2	3	3	8	66.67%	Valid
3	3	3	3	9	75.00%	Valid
4	3	3	3	9	75.00%	Valid
5	2	3	3	8	66.67%	Valid
6	3	3	3	9	75.00%	Valid
7	3	3	3	9	75.00%	Valid
8	2	3	2	7	58.33%	Valid
9	3	3	3	3	75.00%	Valid
10	2	2	2	6	50.00%	Valid
Throw Model	Expert 1	Expert 2	Expert 3	Total Score	Percentage	Information
1	3	3	3	9	75.00%	Valid
2	3	3	3	9	75.00%	Valid
3	3	3	3	9	75.00%	Valid
4	3	3	2	8	66.67%	Valid
5	2	3	3	8	66.67%	Valid
6	3	3	3	9	75.00%	Valid
7	3	3	3	9	75.00%	Valid
8	3	3	2	8	66.67%	Valid
9	3	3	1	7	58.33%	Valid
10	2	2	2	6	50.00%	Valid
Hit Model	Expert 1	Expert 2	Expert 3	Total Score	Percentage	Information
1	3	3	3	9	75.00%	Valid
2	3	3	3	9	75.00%	Valid
3	3	3	3	9	75.00%	Valid
4	3	3	3	9	75.00%	Valid
5	3	3	3	9	75.00%	Valid
6	3	3	3	9	75.00%	Valid
7	3	3	3	9	75.00%	Valid
8	3	3	3	9	75.00%	Valid
9	2	3	3	8	66.67%	Valid
10	2	2	2	6	50.00%	Valid
Catch Model	Expert 1	Expert 2	Expert 3	Total Score	Percentage	Iformation
1	2	3	3	8	66.67%	Valid
2	2	3	3	8	66.67%	Valid
3	2	3	2	7	58.33%	Valid
4	2	3	2	7	58.33%	Valid
5	2	3	2	7	58.33%	Valid
6	2	3	3	8	66.67%	Valid
7	3	3	3	9	75.00%	Valid
8	2	3	3	8	66.67%	Valid
9	3	2	1	6	50.00%	Valid
10	2	2	2	6	50.00%	Valid

Table 2. Criteria for Percentage of Expert Validation Results

Percentage	Meaning	Information
80% - 100%	Excellent	Used (Valid)
60% - 79%	Very Good	Used (Valid)
50% - 59%	Good	Revised(Valid)
< 50%	Poor	Eliminated

Based on the results **Table 2** of the assessment/validation of the above experts, both athletic experts, and physical education learning experts as a whole, it can be concluded that the product of the manipulative basic motion learning model at the elementary school level is feasible to be tested at the next stage, namely small-scale trials and large-scale trials with notes after the revision is made according to the suggestions.

Field Trial Results

The results of field trials are small-scale trials and large-scale trials. In a small-scale trial involving N = 10 research subjects, namely elementary school 01 Banjit Way Kanan Lampung. This small group trial obtained data about attractiveness and ease in practicing the manipulative basic motion learning mode 1 that had been developed. This trial was attended by observers to make direct observations with researchers regarding the attractiveness and application of the models carried out by students. The results of this small-scale test showed that the product of the manipulative basic motion learning model as a whole was feasible to use because all the test subjects on a small scale were able to implement and apply all the model products that had been developed. So thus, the product model can be continued in a broader trial group, namely trials on a large scale.

While in large-scale trials with research subjects on this large-scale test involved N = 50 students of elementary school 01 Banjit Way Kanan Lampung. In the results of this large-scale test, it was found that the overall model product was attractive, easy to do so that students could practice all the learning models that had been developed. So thus the product of the manipulative learning model is appropriate for use by elementary school level students. Departing from the results of expert tests and field trials mentioned above, Nieveen (Trianto, 2007) states that a model is said to be good if it meets the criteria, one of which is logical theoretical rational validity. Likewise, the same opinion according to (Widdiharto, 2004) states that a good learning model, one of which is to have logical theoretical rational characteristics and learning objectives to be achieved.

After the trial was carried out, the final product was obtained, namely in the form of a manipulative basic motion learning model at the elementary school level in the form of a guidebook which is expected to be useful for educators and students in adding references to physical education learning models, especially on basic motion material. The results of this study are relevant to the results of research dari (Prayitno & Sukadiyanto, 2014) which produced a product in the form of a basic motion learning model for children aged 2-4 years. And research from (Amirzan, 2018) produced a product in the form of a locomotor basic motion learning model for grade V elementary school students. The model product developed was divided into several basic motion models, namely kicking, throwing, hitting, and catching. With a total of 40 basic motion learning models. The following are the products of the manipulative basic motion learning model that have been developed **Figure 1**:

Figure 1. The Product of Manipulative Motion Learning Model for Elementary School Level

The product of this basic manipulative motion learning model contains several basic techniques such as kicking, throwing, hitting, and catching. With this development product, it is hoped that it can improve the skills, wealth of movement, and independence of students in the physical education learning process, especially in basic motion material. (Richard A, 2007) explains that "basic skills are useful skills needed by children as provisions for life and behavior". And according to (Sarmidi, 2017) in his research, it explains that basic skills are also called functional skills, meaning that these skills become the foundation for children's activities in the environment and form the basis of competent movement. The following is a prototype image of the elementary school manipulative basic motion learning model product **Figure 2**:

Figure 2.The prototype of the manipulative basic motion learning model at the elementary school level.

Based on the prototype image, several advantages of the developed product can be conveyed, including 1) the developed model product is proven to be suitable for use at the elementary school level because it has gone through trial stages both expert trials and small and large scale trials. 2) the model product developed is creative and easy to apply so that students can be more active, happy, and enthusiastic in following the learning process. 2) learning tools and designs used are simple.

CONCLUSION

This research has produced a product in the form of a manipulative basic motion learning model textbook that is feasible for use at elementary school level students and has gone through expert validation and field tests both on small-scale and large-scale field tests. So the suggestion in this study is that the research subject should be carried out on a wider range of subjects, both from the number of subjects and the number of primary schools used as the trial group. The results of the development of the manipulative basic motion learning model at the elementary school level can be disseminated to all elementary school teachers in Indonesia.

REFERENCES

Amirzan, A. (2018). Pengembangan Model Pembelajaran Gerak Dasar Lokomotor Pada Siswa SD Kelas V. Jurnal Tunas Bangsa, 2(1), 85. https://doi.org/10.24114/pjkr.v2i1.7843

Borg, W. R., & Gall, D. (1983). Educational Research. Longman.

BSNP. (2006). Standar Isi Pendidikan Jasmani Kelas 1-6. Badan Standar Nasional Pendidikan.

Eko, M. J. (2018). Model Pembelajaran Gerak Dasar Manipulatif Berbasis Permainan Kecil untuk Anak Sekolah Dasar Kelas Atas. Prosiding Seminar Dan Lokakarya Fakultas Ilmu Keolahragaan Universitas Negeri Jakarta. http://journal.unj.ac.id/unj/index.php/prosidingfik/article/view/10709

Emzir. (2012). Metodologi Peneltiian Pendidikan: Kuantitatif & Kualitatif. Rajagrafindo Persada.

Gall, M. D., Gall, J. P., & Borg, W. R. (2010). Educational research an Introduction seventh Edition. WIley.

Hendra, J., & Putra, G. I. (2019). Mengembangkan Keterampilan Gerak Dasar Manipulatif Bagi Anak Melalui Permainan Olahraa di Taman Kanak-Kanak. Jurnal Muara Pendidikan, 4(2).

Hidayat, A. (2017). Peningkatan Aktivitas Gerak Lokomotor, Nonlokomotor dan Manipulatif Menggunakan Model Permainan pada Siswa Sekolah Dasar. Jurnal Pendidikan Jasmani Dan Olahraga Volume, 9(2).

Huda, M. (2013). Model-Model Pengajaran dan Pembelajaran. Pustaka Pelajar.

Martinus, & Kesumawati, S. A. (2020). Pelaksanaan Permainan gerak Dasar Manipulatif pada Anak Tingrahita di SLB C Kota palembang. Kinestetik: Jurnal Ilmiah Pendidikan Jasmani, 4(1). https://ejournal.unib.ac.id/index.php/kinestetik/article/view/10574

Prayitno, B., & Sukadiyanto, S. (2014). Pengembangan Model Pembelajaran Gerak Dasar Untuk Anak Usia 2-4 Tahun. Jurnal Keolahragaan, 2(1). https://doi.org/10.21831/jk.v2i1.2566

Richard A, M. (2007). Motor Learning and Control: Concepts and Aplications. McGraw-Hill.

Rusman. (2011). Model- Model Pembelajaran: Mengembangkan Profesionalisme Gurufile:///C:/ProgramData/Microsoft/Windows/Start Menu/Programs/Accessories/Remote Desktop Connection.lnk. PT. Raja Grafindo.

Ruzaman, A. komar. (2018). Prosiding Seminar dan Diskusi Nasional Pendidikan Dasar " Menyonsong Transformasi Pendidikan Abad 21." Pembelajaran Gerak Dasar Dalam Pembelajaran Pendidikan Jasmani, Olahraga, Dan Kesehatan Di Sekolah Dasar Melalui Permainan.

Sarmidi. (2017). Pengembangan Model Pembelajaran gerak dasar Lempar Tangkap untuk Siswa Sekolah dasar di Daerah Pasang Surut Kecamatan Takisung Kabupaten Tanah Laut. Multilateral: Jurnal Pendidikan Jasmani Dan Olahraga, 16(2), 53.

Sugiyono. (2010). Metode Penelitian Pendidikan: Pendekatan Kuantitatif, Kualitatif, dan R&D. Alfabeta.

Sugiyono. (2016). Metode Penelitian Pendidikan: Pendekatan Kuantitaif, Kualitatif, dan R&D. Alfabeta.

Suherman, A. (2009). Revitalisasi Pengajaran Dalam Pendidikan Jasmani. UPI.

Sukardi. (2011). Metodologi Penelitian Pendidikan. Bumi Aksara.

Trianto. (2007). Model Pembelajaran Terpadu dalam Teori dan Praktek. Pustaka Ilmu.

Widdiharto, R. (2004). Model-model Pembelajaran Matematika SMP: Makalah Diklat Instruktur/Pengembangan Matematika SMP Jenjang Dasar. Direktorat Jendral Pendidikan Dasar dan Menengah Pusat Pengembangan Penataran Guru Matematika.