

# Development of Physical Education Model Based on Character for Improving Affective, Cognitive, and Psychomotoric Values in Elementary School

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**Abstract**—The importance of developing character has been emphasized in the goals and functions of the national competency standards for physical education. This study aims to develop a character-based physical education learning model to improve affective, cognitive, and psychomotor values in elementary schools. The specific goal to be achieved in the second year is to test the character-based physical education learning model that has been formulated in previous studies. To achieve this target, research and development was designed. The research subjects were teachers and elementary school students. Data analysis used descriptive statistics and analysis of variance. The results of the study were in the form of testing the character physical education model seen from four learning materials, namely: floor gymnastics, soccer games, cardboard jumping, and round games. The results of the study also show the four main character values observed during the field trial process, namely: courage, cooperation, discipline, and honesty. The highest score of courage value is 5 and the lowest score is 4, the highest score of the cooperation score is 4 and the lowest score is 3, the highest score of the discipline score is 3 and the lowest score is 3, the highest score of honesty is 4 and the lowest score is 3. thus, the character values in elementary school physical education learning can be identified through the values of courage, cooperation, discipline, and honesty and can improve the motoric, cognitive, and affective domains.

**Keywords:** *physical education, character values, elementary school*

## I. INTRODUCTION

The Nation and character building emphasized by Bung Karno in building this nation is a very philosophical matter and concerns the development of the essence of human resource development. Economic development, politics, law, education, and mastery of

science and technology must be integrated with the development of human character as an actor so that it leads to the benefit and welfare of humanity. The development of character that is currently a strong concern of the government and becomes the main task in implementing it at the level of the education unit. One of the problems faced by the Indonesian people is the fading of morality and national identity in the younger generation. The affective values of education gradually began to disappear in young people due to the effects of globalization and modernization. Instilling affective values from an early age is an effort to develop human character. The process of civilizing and empowering affective values can be carried out well if carried out in education units, families, and communities. At the unit level of education the movement of affective values culture is carried out integrated with the process of teaching and learning activities in each subject, through habituation in daily life, and through school extracurricular activities.

Globalization and modernization have changed the structure of Indonesian society into a nation that has lost its identity and personality. In the social aspect, the identity of the Indonesian people tends to lead to a pragmatic and materialistic dimension rather than spiritual and humanist. Whereas from the aspect of education, the younger generation is now closer to violence, individualistic and asocial. Various phenomena of student fights color the main pages of newspapers and television flash news. Plus the rampant practice of bullying by high school students. Education now that emphasizes the cognitive aspects of making students experience psychological stress that leads to "rebellion", "disappointment", and "despair". The affirmation of affective and psychomotor aspects has taken away the child's right to obtain sustainable

education and is characterized by nationality and Indonesia. One cause of this is the system and model of education that is applied. The system in question is centralistic, while the educational model is classic. Education should be understood as an art to foster moral, emotional, physical, psychological, and spiritual dimensions in a child's development. Based on the description above it can be said that developing the character of students can be done through the improvement and optimization of the affective domain of physical education subjects.

## II. METHODS

Conceptually, this research & development approach covers 10 general steps, namely "research and information collecting, planning, developing preliminary form of product, preliminary field testing, playing product revision, playing field testing, operational product revision, operational field testing, final product revision, and dissemination and implementation" [1]. The development research subjects at this trial stage were students in four elementary schools through physical education materials: floor gymnastics, soccer games, cardboard jumping, and baseball games. Research instruments in development research are used in formative evaluation activities. The instrument was arranged by the researcher himself. The contents of the instrument consists of three main things, namely: (1) accuracy of content, (2) clarity of language, (3) attractiveness. Data obtained through a questionnaire on an expert review were analyzed using descriptive statistics. The results of data analysis are used as a basis for revision.

## III. RESULTS

The fifth to eighth steps in the research and development phases are (5) main product revision, (6) main field testing, (7) operational product revision, and (8) operational field testing, namely revising the developed model, conducting trials, and provide a model revision to produce the final product (final). The character-based physical education model is carried out in four learning materials, namely floor gymnastics, soccer games, cardboard jumping, and baseball games. The character values specified in the four materials include the values of courage, discipline, cooperation, and honesty. The following will describe the research results based on the research questions submitted.

1. Forms of learning material based on character values can be integrated in physical education subjects at school.

The form of learning materials based on character values that were successfully formulated and tested consisted of 4 kinds of forms, namely floor gymnastics, soccer games, cardboard jumping, and baseball games. Actually the scope of physical education subjects consists of 7 aspects, as follows: (1) Games and Sports, (2) Development Activities, (3) Self-Test / Gymnastics, (4) Rhythmic Activities, (5) Aquatic (Water Activities), (6) Outdoor Education, (7) Health. The study selected four materials that had been agreed between the research team and physical education teachers with consideration of the ongoing syllabus used in the study period, namely in the current odd semester. The four materials are floor gymnastics, soccer games, cardboard jumping, and baseball games. Gymnastics activities referred to in this study include: Simple dexterity, dexterity without and with tools, floor gymnastics and other activities. The character values that were successfully formulated and tested consisted of 4 types of values namely courage, discipline, cooperation and honesty.

2. The accuracy of the character-based physical education learning model so that it can be applied in learning in school.

After the character-based physical education learning model is validated by experts and revised, then the product is tested on students. This trial was conducted on 120 students. The trial aims to identify and identify various problems such as weaknesses, deficiencies, or the effectiveness of character-based physical education learning models. Observations made by rater, is one indicator to determine the model. Observation by rater is carried out while the model is implemented. Based on observations, there are four forms of physical education learning based on character and its validity value.

### A. Validity Test

The number of subjects or students used in the trial is 120 students. Correlation test is done by inter rater test (inter assessor), data analysis uses Anova-General Multifacet Model from Thorndike which is to test two ordinal type variables and scale with normal / parametric distribution. Data on the results of the observation validity test show a high degree of relationship of an average of 0.930.

TABLE I. LEVEL OF VALIDITY OF PHYSICAL CHARACTER MODEL

No	Perbandingan skor	Koef. kor	Status
1	Rater 1 – total score rater	r = 0.932	Valid
2	Rater 2 – total score rater	r = 0.946	Valid
3	Rater 3 – total score rater	r = 0.910	Valid

Thus based on the statistical calculation of the validity of the characterization model testing trial, it is known that there is a high level of positive relationship, so that the model is declared valid and can be used for data collection on a trial / dissemination scale. Based on the results of the analysis of these factors it can be concluded that the model has a good construct validity, meaning that the test can be used to measure symptoms [2]

#### *B. Reliability test*

The inter-rater reliability test consists of two types, the Inter-Agreement Agreement coefficient correlation between Kappa and the Intraclass Correlation Coefficients (ICC). The inter-rater reliability test from Kappa is used if there are two rater while the ICC inter-rater reliability test is used if the rater is more than 2 people [3]. This study uses 3 rater so that it uses the correlation coefficient between classes. The ICC shows a comparison between variations caused by measured attributes and overall measurement variations. Based on the statistical calculation of the reliability of small-scale trials, it is known that there is a high inter-Rater reliability value of 0.924, so that the instrument is declared reliable and can be used for testing.

### IV. DISCUSSION

#### *A. Forms of Learning Material based on Character Values*

The results of the trial model show that in the Courage aspect: SD 1 is able to do 5 out of 5 aspects of courage, SD 2 is able to do 4 out of 5 aspects of courage, SD 3 is able to do 5 out of 5 aspects of courage, and SD 4 is able to do 4 out of 5 aspects of courage. In the aspect of Cooperation: SD 1 is able to do 3 out of 5 aspects of cooperation, SD 2 is able to do 3 out of 5 aspects of cooperation, SD 3 is able to do 4 out of 5 aspects of cooperation, and SD 4 is able to do 4 out of 5 aspects of cooperation. In the Discipline aspect: SD 1 is able to do 4 out of 5 aspects of discipline, SD 2 is able to do 4 out of 5 aspects of discipline, SD 4 is able to do 4 out of 5 aspects of discipline, and SD 4 is able to do 4 out of 5 aspects of discipline. In the Honesty aspect: SD 1 is able to do 3 out of 5 aspects of honesty, SD 2 is able to do 4 out of 5 aspects of honesty, SD 3 is able to do 3 of 5 aspects of honesty, and SD 4 is able to do 4 out of 5 aspects of honesty.

The form of learning materials based on character values that were successfully formulated and tested consisted of 4 kinds of forms, namely floor gymnastics, soccer games, cardboard jumping, and baseball games. This is in accordance with expert opinion on how to develop the character of students can be done through

the improvement and optimization of the affective domain of physical education subjects. The affective domain places more emphasis on learning experiences related to one's emotions. Such as attitudes, interests, attention, awareness, and values that are directed in the form of the realization of affective behavior [4]. Several common themes emerge in research relating to the psycho-social aspects of physical education [5]. Instilling respect and responsibility is part of character building that teachers and trainers need to teach to students or young athletes [6].

However, in the physical education learning curriculum in elementary schools, currently Core Competencies 1 and 2 which are actually the spirit of the affective or character domain are actually charged to religious subjects and PPKN. Something that actually deviates slightly from the goal of physical education which also targets the affective domain, in addition to the psychomotor and cognitive domains.

The social impact of learning sports activities does occur in students, but the teacher or trainer plays a key role [7]. Learning that takes place in this context depends a lot on the trainer and the individual construction environment. The physical education teacher is in a very central and influential position, so he must instill values and philosophy through sport because it has a direct impact on the participatory experience of sports [8]. The moral realm is more emphasis on learning emotions and experiences of students who are most concerned with attitudes, interests, attention, awareness and values so that students can show affective behavior [4]. "Physical education activities provide a wide variety of opportunities to teach youngsters important lessons about cooperation, winning and losing, and teamwork" [9].

Teachers or coaches who are involved in youth sports coaching have the responsibility to teach affective and strengthen their moral reasoning [6]. One way teachers or trainers must still be able to show their commitment to the teaching of values by upholding and implementing the applicable code of conduct, delivered as stated in the Positive Coaching Alliance. The summary of the Positive Coaching Alliance is a guide how trainers can teach affective which emphasizes the development of aspects of respect [6].

Character education also means, "In character education, it's clear we want our children to be able to judge what is right, care deeply about what is right, and then do what they believe to be right-even in the face of pressure from without and temptation from within" (Thomas Lickona). Thus values can be expected to emerge: trustworthiness, respect, responsibility, fairness, caring, honesty, courage, diligence, integrity,

citizenship. Character education is also contained in the 4 pillars of UNESCO education, among others: learning to know, learning to do, learning to be, and learning to live together. The last 2 pillars tend to be close to the character while the first 2 pillars will be influential when the relevant implement the other pillars. The character load is in accordance with the comprehensive education between science, manners (morals, characters), creativity, innovative, as an effort to advance the growth of manners (inner strength, character), mind (intellect), and the child's body.

### *B. The Accuracy of the Character-based Physical Education Learning Model*

Character values in physical education learning in elementary schools are reflected in the sit-in-class observations and trials that researchers do. From the observations made, the content of character values emerges at the three stages of the learning process: Introduction, Core Training, and Closing. These character values emerge from several physical education learning materials observed, among others: motion exploration material, locomotor skills, non-locomotor, manipulative, athletic kids, rhythmic gymnastics, self-test, body mechanics, physical fitness, soccer games, etc. etc. The subject matter in elementary school does tend to be dominated by elements of the game considering the age of primary school is the age of play. However, subject matter that is basic in motion is also taught such as running, throwing, jumping, and so on. From the subject matter can be identified the character values inherent in the physical education learning process. Those values have not been made a routine agenda for teachers in teaching physical education lessons. In particular the teacher also does not have a guidebook or module that emphasizes the inculcation of character values. Though these values are derived from the nation's character that is currently needed by every individual. The character values above emerge as polite culture that arises from the school environment and from the personality of the teacher. This is consistent with the theory above that the inculcation of absolute character values fully originates from the central role of the teacher both inside and outside the learning process.

In these conditions teachers who teach any subject must have attention and emphasize the importance of character education to students [6]. Schools and teachers hold greater roles and responsibilities in student learning, not only being shown to meet expectations that student performance is successful in cognitive aspects but must emphasize affective learning. In other words, the increase and emphasis on cognitive aspects must be balanced with efforts to improve the aspects of affective development of

students or in the sense of character education should not be ignored.

Based on the description above it can be said that developing the character of students can be done through the improvement and optimization of the affective domain of physical education subjects. The affective domain places more emphasis on learning experiences related to one's emotions such as attitudes, interests, attention, awareness, and values directed towards the realization of affective behavior [4]. The focus of affective domain learning in physical education is on feelings, values, social behavior, and attitudes related to human motion [10]. Affective / psychosocial domains in the context of physical education and sports mean that students learn concepts such as sportsmanship, fair play, respect for others, responsibilities, and motivation.

Character education also means, "In character education, it's clear we want our children to be able to judge what is right, care deeply about what is right, and then do what they believe to be right-even in the face of pressure from without and temptation from within" (Thomas Lickona). Thus values can be expected to emerge: trustworthiness, respect, responsibility, fairness, caring, honesty, courage, diligence, integrity, citizenship. Character education is also contained in the 4 pillars of UNESCO education, among others: learning to know, learning to do, learning to be, and learning to live together. The last 2 pillars tend to be close to the character while the first 2 pillars will be influential when the relevant implement the other pillars. In the religious frame, the terms amanah, fathonah, sidiq, and tabliq are known. The character load is in accordance with the comprehensive education between science, character (morals, character), creativity, innovative, as an effort to advance the growth of character and body of the child.

One of the problems faced by the Indonesian people is the fading of morality and national identity in the younger generation. The affective values of education gradually began to disappear in young people due to the effects of globalization and modernization. Instilling affective values from an early age is an effort to develop human character. The process of civilizing and empowering affective values can be carried out well if carried out in education units, families, and communities. At the unit level of education, the movement of affective values culture is carried out integrated with the teaching and learning process on each subject.

## V. CONCLUSIONS

Based on the results of the research and discussion above and answer the existing problem formulation, the results of the study indicate that:

1. Forms of learning material based on character values can be integrated in physical education subjects at school. The results of the study in the form of four materials that have been tested character physical education models seen, namely: gymnastics, football games, cardboard jumping, and baseball games.
2. The accuracy of the character-based physical education learning model so that it can be applied in learning in school. The results also show four main character values observed during the field trial process, namely: courage, cooperation, discipline, and honesty. The highest score of courage is 5 and the lowest score is 4, the highest score of cooperation is 4 and the lowest score is 3, the highest score of discipline is 3 and the lowest score is 3, the highest score of honesty is 4 and the lowest score is 3. With so that the character values in elementary school physical education learning can be identified through the values of courage, cooperation, discipline, and honesty and can improve the motor, cognitive, and affective domains.

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