THE EVALUATION OF PROVINCIAL SPORT TRAINING CENTER (PELATDA) TOWARDS NATIONAL SPORT COMPETION (PON) XIX/2016 WEST JAVA

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Abstract

The purpose of this study is to evaluate the program of Jambi training centre to Jawa Barat. This research usesquantitative and qualitative approaches, evaluation methods using model Context, Input, Process, and Product (CIPP) developed by Daniel L. Stufflebeam. The data were collected by m means oftriangulation method, using questionnaires, interviews, observation and document study. The results show that: (1) The evaluation context: it has alegal basis and a strong enough Government; goals and policies are well executed; but the responses in accordance with the athletes are so poor. (2) The evaluationInput; the stages of planning the structure exercise program of goes well. But selection process for athletes, coaches, manager still needs to be improved. Thefinancial and infrastructure supports need to be restructured and improved according to the needs of PELATDA Jambi.(3) The evaluation Process; the trainer's exercise program has met the athlete's needs. The planning and assessment during exercise still needs to be improved. The implementation of the championship of PON XIX Jawa Barat in 2016 have seemed to run well and this is in line with the results of evaluation and monitoring, showing that all have gone well and very good.(4) The evaluation of the Product; the increasing physical fitness with qualified and professional athletes and results of PON XIX Jawa Barat in 2016, the Jambi team athletes achieved an excellent result, exceedingthe targets with 6 gold, 6 silver, and 21 bronze medals. But for the athlete's performance must have to be increased and have not been able to contribute to Jambi training centre; this is an evaluation for the implementation of the next Jambi training centre and for obtaining better performance and achievement in the next championship.

Keyword: The Program Evaluation, Training Centre

Sport is an activity that activates a person's metabolism to maintain body's fitness. Sport is the need of every human being andthe benefits of sportcan be seen for human survival. Sportis useful to increase the metabolism of human body so human can carry out their usual activities effectivelyand efficiently. In addition, exercise is one factor that is very important in influencing body's fitness and appearance. Achievement sports, according to Act no. 3 of 2005 on the National Sport System is sports that foster and develop sportsmanship in a planned, tiered, and sustainable manner through training and competition to achieve achievement with the support of science and sporttechnology (Act number 3 year 2005, Sistem Keolahragaan Nasional. (Jakarta: Menegpora, 2005). Good coaching in sports field according to Act number 3 of 2005 on National Sport System includes activities (1) educational sports; (2) recreational sports; and (3) achievement sports. Achievement sports is done through the process of development in a planned, tiered, and sustainable manner with the support of science and sport technology (Act number 3 year 2005, Sistem Keolahragaan Nasional. (Jakarta: Menegpora, 2005)

Provincial Sport Training Center (henceforth: PELATDA) is an effort to filter and train athletes from lower level to higher or professional level. PELATDA is a form of centering sports activity in every province in Indonesia. The existence of PELATDA becomes very important and strategic in building the national sports system. PELATDA is a strategic step in improving the quality of national athletes. So the management of PELATDA must be systematic starting from planning, organizing, implementing, monitoring and evaluating. National Sports Week (henceforth: PON) XIX/2016 in West Java was held from 17-29 September 2016. In this event, Jambi Province attempted to obtain achievementand the sports competition represented by Jambi athletes in PON XIX/2016 in West Java were athletics, weightlifting, bicycle racing, motorcycle racing, basketball, badminton, billiard, bowling, chess, rowing, drum band,

wrestling, judo, karate, shooting, archery, rock climbing, *pencaksilat*, swimming and water polo, *sepaktakraw*, gymnastics, rollerblading, taekwondo, *tarungderajat*, boxing, table tennis, and wushu. Of the 44 sports competed, Jambi Province only participated on 27 sports because Jambi held a training camp for them. This effort is expected to give a proudful achievement. But in fact, the results obtained on the implementation of PON XVIII Riau in 2012 provided were far from expectations.

The following is Jambi Province achievement during PON XVIII / 2012 in Riau

NI	G 4	Medals			
Number	Sports	Gold	Silver	Bronze	
1	Rollerblade	1	1	-	
2	TarungDerajat	1	-	-	
3	Billiard	1	-	-	
4	Rowing	-	1	5	
5	Wushu	-	1	2	
6	Weightlifting	-	1	2	
7	Wrestling	-	3	2	
8	Archery	-	1	-	
9	Bicycle racing	-	-	1	
10	Boxing	-	-	1	
11	PencakSilat	-	-	1	
12	Taekwondo	-	-	1	
13	Water Polo	-	-	1	
14	Judo	-	-	1	
15	Gymnastic	-	-	3	
	Total	3	8	20	
	Ranking		24	_	

Source: Secretariat of National Sports Committee (henceforth: KONI), Jambi Province, 2016.

If compared with the previous PON held in East Kalimantan Province in 2008, the data above shows a significant decrease of achievement. The following is Jambi Province achievement during PON XVII / 2008 in East Kalimantan.

Name Is an	DON	Medals			
Number	PON	Gold	Silver	Bronze	
1	PON XVII/2008 East Kalimantan	11	17	27	
Total			55		
Ranking			15		

Source: Secretariat of KONI, Jambi Province, 2016.

Based on the primary data as described above, and secondary data obtained from observations and interviews with coaches and KONI officials in Jambi Province, the training outcome is under the expectations and it really becomes a concern. This performance drop is so ironic. The previous rank was 15 with 55 medals and went down sharply became 24 with 31 medals. Jambi Province achievement is far from expectations, not only is this the responsibility of the government or KONI Jambi Province alone, but it is also the responsibility of all elements of society in Jambi Province.

The SWOT program (strengths, weaknesses, opportunities, and threats) is a method used to analyze or evaluate the strengths, weaknesses, opportunities and threats in a championship. The evaluation is useful to improve the management of Jambi Province PELATDA to get better achievements in accordance with the expectations of Jambi Province in the PON XIX/2016 in West Java. The strength will

be maintained and should be continuously improved, while the weakness must be treated immediately in order to achieve the goal of PELATDA program. From the various descriptions above, the author is interested to examine the evaluation of PELATDA program in Jambi Province to welcoming PON XIX 2016 in West Java.

The focus of this evaluation research is to evaluate the management of Jambi Province PELATDA program which includes five management functions, namely planning, organization, implementation, monitoring and evaluation. The evaluation model approach uses CIPP evaluation model consisting of four components of Contexts, Input, Process, and Product. The sub-component of Contexts Evaluation includes three things, namely: 1) Legal foundation, 2) Program objectives and policies, 3) Athletes need. Input evaluation includes six things: 1) Structure of training program, 2) Athlete, 3) Trainer, 4) Trustee, 5) Fund Source and 6) Facilities and Infrastructure. Process evaluation includes five things: 1) Materials fit with athlete's needs, 2) Processimplementation and time of practice, 3) On-practice assessment, 4) Championship implementation, and 5) Program evaluation. Lastly, Product Evaluation includes three things: 1) Athlete's skill and fitness, 2) Achievement of training program, and 3) Achievement of athlete.

This research puts its focus on program development evaluation of Jambi Province PELATDA heading to perform at PON XIX / 2016 West Jawa. The analysis will be done throughthe evaluation of context, input, process, and product. Thus, the research problems are formulated as follow: 1) What is the legal basis of Jambi Province PELATDA program? 2) How is the conformity between the program objectives and the policies of Jambi Province PELATDA? 3) How is the needs of Jambi Province athletes? 4) How is the structure of the training program of each sport branch at Jambi Province PELATDA? 5) How is the athletes' participation at Jambi Province PELATDA? 6) How is the coaches' participation at Jambi Province PELATDA? 7) How is the officials' participationat the Jambi Province PELATDA? 8) How is the financial budget of Jambi Province PELATDA? 9) How are facilities and infrastructure owned by Jambi Province PELATDA? 10) How does the exercise material suitto the athletes' needs at the Jambi Province PELATDA? 11) How is the implementation of process and time of exercise at Jambi Province PELATDA? 12) How is the on-training assessment at Jambi Province PELATDA? 13) How does the championship or sport tournament run at Jambi Province PELATDA? 14) How is the program evaluation at Jambi Province PELATDA? 15) How are the skills and fitness of the athletes at Jambi Province PELATDA? 16) How is the achievement of the training program at Jambi Province PELATDA? 17) How are the athletes' achievement during Jambi Province PELATDA?.

Program evaluation has a meaning related to the application of the value scale towards the policy or program outcomes that have been implemented. A simple description of the evaluation is the processof achieving the program objectives. Evaluation itself is not only used to knowthe program achievement, butit can also be used as a basis for carryingout follow-up activities in arranging next policy. Sukardi further explains the evaluation developed through the following management: Program evaluation is also developed from several management pillars or management concepts, namely: monitoring, evaluation, and control. In order to achieve its objectives, an institution needs to set up all potentials and resources so they can lead to theachievement of goals.

Meanwhile, according to Daniel L. Stufflebeam and Chris L. S. Coryn, evaluation is defined as follow:

Evaluations based on randomized experiments can provide consumers with useful information on the comparative outcomes of competing programs, products, or services. However, in many evaluations, a controlled experimental approach would not be feasible, or it would be counterproductive; it might be unethical; or it might fail to address key questions about needs, objectives, plans, processes, side effects, and other important aspects of a program (Daniel L. Stufflebeam dan Chris L. S. Coryn, *Evaluation Theory, Models, and Applications*. (San Fransisco: Jossey-Bass AWiley Brand, 2014), p. 7

Paton explains that program evaluation is a systematic data collection process for assessing and deciding a program (Michael Quin Paton. *Utilization Facused Evaluation*. (California: Sage Publication, Inc., 2005), p. 23)

In addition, according to Widiastuti, evaluation is the process of placing values on a measurement. This involves or compares scores with the scale and value implanted. Evaluations may use a normative scale (relative) derived from the scores of paired or standard (absolute) groups that require participants to perform at the standard level of the applied results (Widiastuti, *Tes dan Pengukuran Olahraga* (Jakarta: Rajawali Pers, 2015), p.2). According to James Tangkudung, the evaluation of the program is focused into several things, namely:Evaluation is focused on an activity in one particular unit, where the activity can be a program, a process or a work result, place, organization, or institution. While the program is a system that is not done only once but on an ongoing basis (James Tangkudung, *Macammacam Metodologi Penelitian (Uraian dan Contohnya)*. (Jakarta: Lensa Media Pustaka Indonesia, 2016), p. 81).

Based on above arguments, it can be concluded that the evaluation program is a process, where the process must be done systematically, including in data collection. Evaluation is used both for decision making and assessment. So the evaluation of a program has three important things, namely data collection, assessment, and decision making. Program evaluation is often used to determine the effectiveness of the program, where the effectiveness describes to what extent the program or initiative meets the expected results, and to inform action (Michael Smith, A Guide to Planning and Conducting Program Evaluation. (Columbia: Foundation for Health Services, 2009: 10.)

There are four basic principles proposed by Daniel L. Stufflebeamin an effort to conduct an evaluation, namely utility, feasibility, propriety, and accuracy: (Daniel L. Stufflebeam dan Chris L. S. Coryn, *op. cit.*,p.659-666) 1) Utilitymeans the evaluation to be informative. 2) Feasibility is the evaluation designed in line with the field to be evaluated and with effectivecost. 3) Propriety means the evaluation to be done legally and uphold ethics. 4) Accuracy is intended for evaluation to be accurate, valid, reliable, and comprehensive information. The evaluation model is used to carry out an evaluation towards a program. The following are the models that can be used as reference: (1) Countenance Evaluation Model, (2) Logic Model, (3) Wholey Evaluation Model, (4) CSE-UCLA Model, (5) CIPP Model, (6) Discrepancy Model, And (7) Responsive Evaluation Model.

Provincial Sport Training Centre (PELATDA)

PELATDA is one of the efforts to improve performance of an athlete. PELATDA is also an exercise activity centered in a place or area located at KONI Province with the aim of equation of perception both from technical aspect and nontechnical aspect. Jambi Province PELATDA is as a benchmark of the national sports achievement coaching efforts towards the National Sports Week (PON) event. Jambi Province PELATDA is a sports training program to achieve success in PON XIX / 2016 in West Java. PON is an indicator of the success of sports performance over a period of 4 years.

Evaluation Program Model

The model used in this research is a decision model developed by Stufflebeam known as CIPP Evaluation Model. The CIPP model (context, input, process, product) was developed by Daniel L. Stufflebeam. He defines evaluation as a systematic process in describing, obtaining, providing useful information for decision-making alternatives. Information in evaluation are obtained by collecting, organizing, and analyzing information and synthesizing them so that the information obtained can be used as a consideration of the stakeholders evaluation. The advantages of CIPP evaluation are (a) this model identifies and assesses expected and unwanted results in both short and long term; (B) this model is more comprehensive among other evaluation models, this is because the evaluation object is not only covering the results but also includes the context, input, process, and product or results; And (c) this model has the potential to move in the areas of formative and summative evaluation. So it is equally good in making improvement during the program, as well as providing the final information.

METHOD

The approaches in this research are quantitative and qualitative. Quantitative approach is used to provide an overview of respondents' statements obtained through questionnaires with Likert Scale. While the qualitative approach is exploring, using facts, giving meaning and using inductive patterns.

Meanwhile, the research method used is program evaluation research. This research is an evaluative research using descriptive method with the aim of assessing and describing the implementation of Jambi Province PELATDA. Descriptive method is a method in studying an object, condition, and system of thinking in the present based on the facts. This research is more oriented to the system that tries to answer the effectiveness of Jambi Province PELATDA program with CIPP model.

The design of this program evaluation researchisusing CIPP model. With this design, the evaluation is carried out within four stages, namely: context evaluation, input evaluation, process evaluation, and product evaluation. The stages and types of CIPP Model evaluation process and its effects in system improvementare detailed in the following figures:

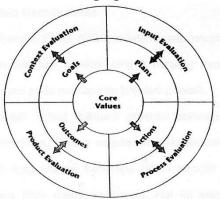


Figure 3.1. Stages in CIPP Model of Evaluation and its effect towards system improvement. Source: James Tangkudung., *Macam-Macam Metodologi Penelitian (Uraian dan Contohnya)*, (Jakarta: Penerbit Lensa Media Pustaka Indonesia, 2016: 90. Instruments are used to collect data for the research. The instruments for this research are questionnaires, interviews, observation, and documentation. The following is interview guidelines for Sport Training Centre (PELATDA) Jambi Province

Evaluation Component	Indicator	Sub Indicator	Question number	Total of question
Context	1. Legal Basis	The suitability of legal basis	1	1
	2. Program Policy and Purpose	Conformity between program policy and program purpose	2,3	2
	3. Athlete Needs	3. Athelete needs	4,5	2
Input	1. Exercise Training Structure	The stages of training program structure on each sport branch	1,2	2
	2. Athlete avaibility	Its selection and recruitment process	3	1
	3. Coach availbility	3. Its selection and recruitment process	4	1
	4. Official avaibility	4. Its selection process and recruitment	5	1

	5. Financial	5. The avaibility of sufficient funding	8,9,10	3
	source	6. The avaibility of facility and	5,6	2
	6. Facility and Infrastructure	infrastructure		
Process	1. The conformity between material and athlete needs	The conformity between material and athlete needs	1	1
	2. The implementatio n of process and time of exercise	2. There is a scheduled practice time	2	1
	3. Assessment during training	3. There is assessment during practice exercise	3	1
	4. Championship and tournament	4. The championship event	6,7,8	3
	5. Program evaluation	5. There is an adequate program evaluation	9,10	2
Product	1. Athlete skills and fitness	1. Improvement on athlete skills and fitness	1	1
	2. The achievement of training program	2. There is achievement on the training program	3,4,5,6	4
	3. Athlete achievement	3. Athletes successfully gain achievement	2,3,4,5,6,	6
	r	ΓΟΤΑL		34

Questionnaire specification for Program Evaluation at Sport Training Centre (PELATDA)

Jambi Province

Evaluation Component	Indicator	Sub Indicator	Question number	Total Question
Context	1. Legal Basis	1. The suitability of legal basis	1,2,3	3
	2. Program Policy and Purpose	Conformity between program policy and program purpose	4,5,6,7	4

Evaluation			Question	Total
Component	Indicator	Sub Indicator	number	Question
-	3. Athlete Needs			
		3. Athelete needs	8,9,10,11,12	5
Input	1. Exercise Training Structure	1. The stages of training program structure on each sport branch	13,14,15,16	4
	2.Athlete avaibility3.Coach availbility	2. Its selection and	17,18,19,20, 21	5
	4. Official avaibility	recruitment process 3. Its selection and	22,23,24,25,	5
	5. Financial source	recruitment process	26	4
	6. Facility and Infrastructure	4. Its selection process and recruitment	27,28,29,30	4
		5. The avaibility of sufficient funding	31,32,33,34, 35,36,37	7
		6. The avaibility of facility and infrastructure	38,39,40,41, 42,43	6
Process	1. The conformity between material and athlete needs	1. The conformity between material and athlete needs	44,45,46,47, 48	5
	2. The implementation of process and time of exercise	2. There is a scheduled practice time	49,50,51,52, 53	5
	3. Assessment during training			
	4. Championship and tournament	3. There is assessment during practice exercise	54,55,56	3
	5. Program evaluation	4. The championship event	57,58,59	3
		5. There is an adequate program evaluation	60,61,62,63	4
Product	1. Athlete skills and fitness	Improvement on athlete skills and fitness	64,65	2
	2. The achievement	Huicos	66,67,68,69	4

Evaluation Component	Indicator	Sub Indicator	Question number	Total Question
	of training program	2. There is achievement on the training program		
	3. Athlete achievement	2 Athlotos suggesfully	70,71,72,73, 74,75	6
		3. Athletes successfully gain achievement 4.		
	7	TOTAL		75

Data collection method used for this research is by employing interview, distributing questionnaire, document study and observation. The following is the resume of data collection procedure and technique

Evaluation Component	Focus	Indicator	Data Source	Data Collection Method	Data Analysi s
Context	1. Legal	1. The	1.Program	Document Study,	Percenta
	Basis	suitability of legal basis	Chief 2.Event	Questionnaire, and interview	ge
	2. Program Policy and Purpos3. Athlete Needs	2. Conformity between program policy and program purpose 3. Athelete needs	Organizer	interview	
Input	1.Exercise	1. The stages of	1. Event	Document Study,	Percenta
	Training	training	organiser	Questionnaire,	ge
	Structure	1 0	2. Athlete	and interview	
		structure on			
		each sport branch	4. Official		
	2.Athlete	2. Its selection			
	avaibility	and			
		recruitment process			
	3.Coach	3. Its selection			
	availbility	and			
		recruitment process			
	4. Official	4. Its selection			
	avaibility	and			
		recruitment			
	4. Financia	process 5 The evolution			
	1 source	5. The avaibility			

	6. Facility	of sufficient funding			
	and Infrastruct ure	6. The avaibility of facility and infrastructure			
Process	1. The conformi ty between material and athlete needs 2. The impleme ntation of process and time of exercise 3. Assessm ent during training 4. Champio nship and tourname nt 5. Program evaluatio n	1.The conformity between material and athlete need. 2. There is a scheduled practice time 3.There is assessment during practice exercise 4.The championship event 5. There is an adequate program evaluation	1. Event organiser 2. Athlete 3. Coach 4. Official	Questionnaire, interview, document analysis, inventory and observation.	Percenta ge and Categori zation
Product	1. Athlete skills and fitness 2. The achieve ment of training progra 3. Athlete achieve ment	1. Improvement on athlete skills and fitness 2. There is achievement on the training program 3. Athletes successfully gain achievement	Program and material for practice exercise Achieveme nt document	Document analysis and interview	Deskript ive

RESULT AND DISCUSSION

The context evaluation of the Jambi Province PELATDA Program consists of three things: 1) the legalbasis of the PELATDA program, 2) the objectives and policies of the PELATDA program, and 3) Theathlete's needs and they are categorized very well.

Assessment of Jambi Province PELATDA Program Structure Overall, the PELATDA program has been well planned, as indicated by the average score of PELATDA program planning scores at 2.00 or 40% of the maximum score. Assessment of Athletes of the PELATDA Program. The assessment of the PELATDA athletes is 2.20 or 44%, indicating that the preparedness ofthe PELATDA athletes is considered sufficiently to join PELATDA. Assessment of Coach of the PELATDA Program The assessment of the readiness of trainers/coaches who teach at PELATDA obtains an average total score of 1.93 or 38.67% of the maximum score which implies an inadequacy of the coaches' readiness. Assessment of Officials the PELATDA Program Performance of managers/officials on PELATDA program is regarded as sufficient enough by the observers with a total average score of 2.66 or 53.3% of the maximum score. Assessment of Funds Sources of the PELATDA Program Based on the results of the assessment, it shows that the budget funding resources of PELATDA program is regarded sufficient enough by the observers with a total average score of 2.66 or 53.3% of the maximum score. Assessment of Infrastructure and Facilities of the PELATDA Program Based on the results of direct observation, the condition of facilities and infrastructure as a whole is categorized as inadequate. However, the place of the PELATDA program has met the criteria in implementing the PELATDA by utilizing the available facilities and places optimally.

The conformity between exercise material and the athlete needs Overall assessment of material suitability to athletes' needs was rated as poor and obtained an average total score of 1.57 or 31.43% of the maximum score. 2. The implementation of process and time of exercise Overall assessment of the implementation process of the training program was rated as poor and obtained an average total score of 1.57 or 31.43% of the maximum score. Assessment during centralized training at PELATDA Overall assessment of athletes activity is generally poor, with a mean score of 1.53 or 30.67% of the maximum score. PON XIX/2016 Championship in East Java The overall performance of each sport branch shows that each sport branch is rated as good with an average total score of 4.26 or 85.0% of the maximum score. Thus, as a whole it can be said the implementation of PELATDA is quite effective and satisfying for the athletes.

From 27 sport branches attended by Jambi Province athletes, Jambi province was successful to win 6 gold, 6 silver and 21 bronze medals and was ranked 23. This means that the target set by Chairman of KONI is achieved and in accordance with the calculation. However, the target of Development and Achievement Division (BINPRES) as well as the Jambi Province Governor is not successfully reached.

CONCLUSION

Context, The legal foundation is strong enough, Program objectives and policies are excellent, The needs of athletes assisted by PELATDA are fulfilled / excellent. Input, Planning stages of training program structure at Jambi Province PELATDA on each sport branch is in accordance with the criteria set by coach, officials/manager, and KONI Jambi Province. The athlete selection and recruitment system of Jambi Province PELATDA is carried out in accordance with the stipulated provisions. The coach selection and recruitment should be done with the criteria established by Jambi ProvinceKONI. The recruitment of the officials or manager is based on criteriasthat have been established by selection team of Jambi Province PELATDA. The funds owned by Jambi Province PELATDA are from Jambi Province Budget (APBD), managed by the Department of Sports and Youth, and grant their authority to Jambi ProvinceKONI. Facilities and Infrastructure used in Jambi Province PELATDA are adequate. However, there are still some equipment that is less feasible for use at Jambi Province PELATDA. Process. Materials are tailored to meet the athletes' needs during PELATDA. Planning of the scheduled process undertaken by the manager of PELATDA has been implemented well. Not every coach does the ontraining written assessment. There are also coaches who implement verbal punishment if there is rule violation. During PON XIX/2016 championship in West Java, overall the team of Jambi Province

PELATDA were doing well. Evaluation is well implemented. **Product.** There is an increase on athletes' skill and fitness. The achievement of the training program at Jambi Province PELATDA has been in line with the arranged plan. Teamof Jambi Province PELATDA shows an achievement improvement on PON XIX/2016 West Java.

REFERENCES

- Ariyanto, Muhammad Aziz. Evaluasi program Manajemen Pusat Pendidikan dan Latihan Olahraga Mahasiswa (PPLM) di Jawa Tengah. Disertasi. Jakarta: PPs. Universitas Negeri Jakarta, 2015.
- Muhaimin, Mohammad. "Model Evaluasi CIPP (Context, Input, Process, Product)". http://www.kompasiana.com/muhaiminmoh/model-evaluasi-cipp-context-input-process-product 552ab300f1 7e611 530d62496. (diakses tanggal 15 November 2015).
- Stufflebeam, Daniel L. dan Chris L. S. Coryn, *Evaluation Theory, Models, and Applications*. San Fransisco: Jossey-Bass AWiley Brand, 2014.
- Stufflebeam, Daniel L., Madaus, George F., danKellaghan, Thomas,. *Evaluation Models View on Educational and Human Services Evaluation*. Boston: Kluwer-Njihoff Publishing, 2005.
- Stufflebeam, Daniel L. "Empowerment Evaluation, Objectivist Evaluation, and Evaluation Standards: Where the Future of Evaluation Should not Go and Where it Needs to Go". *American Journal of Evaluation*, Vol 15 (3), Spring, 1994.
- Tangkudung, James. *Macam-macam Metodologi Penelitian (Uraian dan Contohnya)*. Jakarta: Lensa Media Pustaka Indonesia, 2016.
- Widiastuti, Tes dan Pengukuran Olahraga. Jakarta: Rajawali Pers., 2015.
- Smith, Michael., *A Guide to Planning and Conducting Program Evaluation*. Columbia: Foundation for Health Services, 2009.